

FIRST SPACE RENAISSANCE INTERNATIONAL CONGRESS – 2011 DAY 3 – JULY 9TH 2011

CONGRESS DAY 3 - ELECTION OF THE CHAIRPERSON

[17.00.02] Adriano Autino: SRI CONGRESS DAY 3 BEGINS NOW! [17.00.16] Adriano Autino: Ok friends, welcome to everybody!

[17.00.36 | Edited 17.00.45] Adriano Autino: please could the present ones say 'ready'?

[17.00.50] Sergio Lebid: Ready

[17.00.55] wheatsheaf1: ready (wave) [17.00.58] Adriano Autino: hello Sergio! [17.00.59] Rijendra Thapa: ready

[17.00.34] Kijeridia Hiapa. Feady [17.01.11] Sergio Lebid: Hello Adriano! [17.01.18] Sergio Lebid: Hello All!

[17.01.28] Rijendra Thapa: hi

[17.01.59] Adriano Autino: roll call... (seeing the green icons...)

Anton Volkonskiy Bonny Lee Michaelson

Boris Pukl Maria Catalina David Dunplop Eric Klein

G. B. Leatherwood

Jesus Raygoza

Keith Henson

Krahazik Dragon

Meidad Pariente

Noufi

Rich Thoma

Rick Sanford

Rijendra Thapa

Rob Hunt

Sergio Lebid

Stephanie Lynne Thorburn

Thomas Koszorou

Xavier Alabart

[17.02.24] Adriano Autino: Kim Peart [17.02.36] Adriano Autino: Neda Ansari

[17.03.19] Thilina Heenatigala: Hello Adriano, I'm here too...

[17.03.26] Adriano Autino: Hi Thilina!

[17.03.36] Adriano Autino: Neda, can you read us?

[17.05.13] *** Adriano Autino removed Neda Ansari from this conversation. ***

[17.05.16] *** Adriano Autino added Neda Ansari ***

[17.05.33] Adriano Autino: are you in now?

[17.06.05] wheatsheaf1: not seeing neda, adriano

[17.06.26] Adriano Autino: she's on another chat, she couldn't see this one...

[17.06.37] Adriano Autino: i wonder if other members are in the same condition...

[17.06.52] wheatsheaf1: maybe so, I can't see many members

[17.06.53] Adriano Autino: please give me few seconds, I'll make a check

[17.07.54] Kim Peart: Is there anybody out there?

[17.08.32] Rijendra Thapa: hello

[17.08.54] Rijendra Thapa: i hope i am in the right chat, right

[17.09.03] Adriano Autino: yes, you are



- [17.09.07] Kim Peart: 1.08am Midnight greeting
- [17.09.11] Rijendra Thapa: thanks
- [17.09.12] wheatsheaf1: hi mahendra, i see you [17.09.22] Adriano Autino: Gail, are you in?
- [17.09.26] Jennifer Bolton: ready [17.10.26] Neda Ansari: Hi all, [17.10.46] wheatsheaf1: hi neda, all
- [17.10.51] G B Leatherwood: Yes, but I have bad news for you and the group. A family emergency has occurred (nothing life threatening, thanks) but I will not be able to continue participating today. I'll try to explain later, but for now I must leave.
- [17.11.07] wheatsheaf1: take care gail...
- [17.11.26] Adriano Autino: Gail, I am sorry for that
- [17.12.30] Adriano Autino: ok, than we don't have our favorite chairman today
- [17.12.31] Sergio Lebid: Take care Gail
- [17.12.58] Adriano Autino: who would like to chair this conference? [17.14.07] Adriano Autino: or nominate a candidate chairperson?
- [17.14.41] Adriano Autino: I propose Sergio
- [17.14.48] Rijendra Thapa: ohk [17.14.52] wheatsheaf1: second serg
- [17.15.00] Neda Ansari: yes, Sergio
- [17.15.58] Sergio Lebid: Thank you Adriano and I greatly appreciate it but I regret I must decline this time for my
- health issues...
- [17.16.33] wheatsheaf1: mahendra?
- [17.16.33] Sean Con: hello
- [17.16.35] Sean Con: this one?
- [17.16.40] Rijendra Thapa: yeah
- [17.16.42] Sean Con: is the congress chat?
- [17.16.51] Rijendra Thapa: but i think
- [17.17.03] Rijendra Thapa: i hve no idea of chairperson
- [17.17.06] Rijendra Thapa: haha
- [17.17.12] Rijendra Thapa: sorry for that bt
- [17.17.14] Jesús Raygoza: O.K., Adriano, I got it.
- [17.17.29] wheatsheaf1: we'll advise u as we go along...;)
- [17.17.41] Rijendra Thapa: ok
- [17.17.47] Rijendra Thapa: i agree
- [17.17.52] *** Adriano Autino removed Sean Con from this conversation. ***
- [17.17.56] *** Adriano Autino added Sean Con ***
- [17.18.20] Adriano Autino: Kim, would you be our (night) chairperson?
- [17.18.32] Adriano Autino: Sean, can you see us now?
- [17.18.52] *** Giovanni Anselmi has left ***
- [17.18.52] Sean Con: yes, thanks adriano
- [17.19.05] Kim Peart: Now thought Mahendra agreed?
- [17.19.34] Rijendra Thapa: ohk but i am new to the confernece
- [17.19.42] Jesús Raygoza: Hi! Adriano. Hi! David Dunlop, how are you? Hi! EVERYBODY!!!
- [17.19.44] Rijendra Thapa: so better if someone
- [17.19.44] Adriano Autino: oh, sorry, I was checking the missing persons...
- [17.20.02] Sergio Lebid: Hi Jesus
- [17.20.11] Adriano Autino: Hi jesus
- [17.20.19] Jesús Raygoza: Hi! Sergio.
- [17.20.23] wheatsheaf1: I'll nominate Kim if Mahendra's not keen
- [17.20.43] Rijendra Thapa: yeah kim
- [17.20.58] Rijendra Thapa: i support wheatsheaf1
- [17.21.00] Jesús Raygoza: Adriano. I will keep an eye on the chat.
- [17.21.13] wheatsheaf1: call me Rob Hunt:)
- [17.21.21] Rijendra Thapa: ok Rob
- [17.21.26] Rijendra Thapa: kim
- [17.21.31] Rijendra Thapa: as i am new



[17.21.32] Kim Peart: Jesus is also keen [17.21.36] Rijendra Thapa: sorry for that but [17.22.24] Rijendra Thapa: Yeah Rob i agree kim [17.22.29] Rijendra Thapa: as chairperson

[17.23.31] Rijendra Thapa: hello [17.23.38] Jesús Raygoza: Hi! Kim. [17.23.54] Kim Peart: Hello Jesus

[17.24.03] Sean Con: gentelmen. if i may suggest, i would assign a number to each of the participants, and generate a random number, and then assign the person designated that number as chair, as i am sure, each of the participants are equally capable of chairing

[17.24.36] Adriano Autino: @Sean, that's why we shouldn't loose toomuch time on this matter

[17.24.42] Rijendra Thapa: hello i am not receiving msg [17.24.49] wheatsheaf1: the clock is ticking - who's our chair?

[17.25.03] Adriano Autino: if all agree, Kim, could sit on the chiar...

[17.25.15] wheatsheaf1: second kim

[17.25.20] Neda Ansari: Kim [17.25.38] Sean Con: ay for kim

[17.25.43] Kim Peart: That's Ok - I think

[17.25.49] Anton Volkonskiy: ay

[17.25.50] Neda Ansari: ay [17.25.59] Sergio Lebid: ay

[17.26.03] wheatsheaf1: go gueensland boy!

[17.26.03] Rijendra Thapa: hi adriano m i disconnected

[17.26.12] Adriano Autino: ok, mr. chairman, may i propose the agenda for today?

[17.26.25] Rijendra Thapa: Jesus do check me

[17.26.44] Kim Peart: OK

AGENDA OF DAY 3 AND DAY 4

[17.26.47] Adriano Autino: CONGRESS DAY 3 - Saturday July 9th 2011

15.00 GMT

- a) chairperson, if none objection => Gail
- b) approval of agenda

15.15 GMT

- c) FINAL RESOLUTION, including:
- Political guidelines emerging from the congress, for our public outreach viral campaign
- Congress vote on the final resolution

17.00 GMT

- d) THREE PROJECTS: titles, structure and general plans, committees, meetings
- Congress vote on titles and chairpersons (when available)
- Committees composition doesn't need the vote of the congress

18.00 GMT

f) adjourn

[17.27.17] Adriano Autino: the angenda of tomorrow will be all on organizational matters

[17.27.33] Adriano Autino: CONGRESS DAY 4 - Sunday July 10th 2011

15.00 GMT

- a) chairperson, if none objection => Gail
- b) approval of agenda

15.15 GMT

c) SRI FINANCIAL BALANCE, July 2010 - July 2011



- Congress vote on the balance

15.45 GMT

- d) SRI EXECUTIVE COMMITTEE, including:
- list of members
- methodology and rules
- main goals of the Committee, 2011 2015
- Congress vote on the list of members, methodology and rules

17.30 GMT

- e) PR COMMITTEE, including:
- general planning
- main communication campaigns
- new version of the SRI mission statement
- Congress vote on setup and general planning
- Committee composition doesn't need the vote of the congress

18.00 GMT

- g) adjourn
- [17.28.29] Adriano Autino: now, we can approve both days agendas, if we prefer, or just the today's one
- [17.28.58] Kim Peart: Motion?
- [17.29.16] Adriano Autino: I move to approve the complete agenda of today and tomorrow
- [17.29.30] Kim Peart: Second?
- [17.29.40] Sean Con: second
- [17.29.51] Kim Peart: Vote
- [17.29.55] wheatsheaf1: aye
- [17.30.00] Neda Ansari: aye
- [17.30.02] *** Adriano Autino removed Stephanie Lynne Thorburn from this conversation. ***
- [17.30.05] *** Adriano Autino added Stephanie Lynne Thorburn ***
- [17.30.12] Anton Volkonskiy: ok
- [17.30.12] Jennifer Bolton: aye
- [17.30.19] Jesús Raygoza: aye
- [17.30.23] Sergio Lebid: aye
- [17.30.28] Adriano Autino: Stephanie, can you read now?
- [17.30.57] Kim Peart: Any more votes?
- [17.31.35] Kim Peart: OK Adriano?
- [17.31.39] Adriano Autino: aye
- [17.32.11] Kim Peart: Appears to be passed
- [17.32.22] Sean Con: chair, related to the agenda, i think i have a concern: it is as followes: do we need a minimum
- number of ayes to pass a motion?
- [17.32.28] wheatsheaf1: point of order chair...
- [17.32.56] Kim Peart: OK W
- [17.33.06] wheatsheaf1: have we got a minimum chorum?
- [17.33.26] Kim Peart: Unknown
- [17.33.58] Adriano Autino: well, the Statutes says something, about guorum, but we are not respecting it
- [17.34.18] Adriano Autino: we have a number of non registered members here, and we allowed them to vote
- [17.34.24] wheatsheaf1: sounds fair enough for me, lets get on with it
- [17.35.08] Krahazik Dragon: I couldn't afford to register.
- [17.35.19] Adriano Autino: don't think about that now
- [17.35.34] *** Adriano Autino removed Camilo Andres Reyes from this conversation. ***
- [17.35.38] *** Adriano Autino added Camilo Andres Reves ***
- [17.36.10] Adriano Autino: ok, mr. chair, we are 15 minutes late...
- [17.36.14] Camilo Andres Reyes: HELLO PEOPLE
- [17.36.26] Camilo Andres Reyes: SORRY TO BE LATE HERE!!



THE FINAL RESOLUTION REPORT, BY AA (PART 1)

- [17.36.28] Adriano Autino: i would propose to download the final resolution draft...
- [17.36.40] Kim Peart: OK
- [17.36.41] Adriano Autino: Hi Camilo, we just approved the agenda
- [17.36.51] Camilo Andres Reves: OK:)
- [17.36.52] Adriano Autino: http://www.spacerenaissance.org/SRIC/SRIC_Final_Resolution.pdf
- [17.37.20] Adriano Autino: when everybody will have it on their desktop, we can start
- [17.37.40] Adriano Autino: please notice when ready
- [17.37.46] Sean Con: done
- [17.37.52] Camilo Andres Reyes: OK, I HAVE IT NOW
- [17.38.03] wheatsheaf1: ready
- [17.38.08] Kim Peart: Have it and read it
- [17.38.09] Jennifer Bolton: ready
- [17.38.13] Sergio Lebid: ready
- [17.38.15] Jesús Raygoza: Ready
- [17.38.41] Camilo Andres Reyes: READY!
- [17.38.53] Anton Volkonskiy: (y)
- [17.39.09] Neda Ansari: Just looked it over
- [17.39.11] Krahazik Dragon: ready
- [17.39.55] Kim Peart: OK Adriano
- [17.40.11] Camilo Andres Reyes: I THINK WE CAN START :ç)
- [17.40.12] Camilo Andres Reyes: :)
- [17.40.26] Adriano Autino: just a moment, i have to connect a person
- [17.40.34] Camilo Andres Reves: ;) OK
- [17.41.09] CommanderCatalina: greetings all
- [17.41.19] Camilo Andres Reyes: HI COMMANDER:)
- [17.41.23] Sean Con: Hola mariata
- [17.41.23] Kim Peart: Hello Maria
- [17.41.33] Neda Ansari: Hi Maria
- [17.41.48] CommanderCatalina: I will download now
- [17.42.37] Kim Peart: All well Adriano
- [17.43.19] *** Adriano Autino removed Rijendra Thapa from this conversation. ***
- [17.43.22] *** Adriano Autino added Rijendra Thapa ***
- [17.43.26] CommanderCatalina: I am waiting for the download but you may begin, it is taking a long time.
- [17.43.34] Adriano Autino: ok, let's start then
- [17.43.52] Adriano Autino: my final resolution draft was a hard work
- [17.44.13] Adriano Autino: only yesterday morning i waked up knowing what i had to write
- [17.44.16] Kim Peart: Hello Jesus me chair
- [17.44.39] Adriano Autino: it took me the whole day, and Kim was so kind to edit the text at the light speed...
- [17.45.20] Adriano Autino: therefore i hope you will forgive any incoherence that might be still present
- [17.45.28] Camilo Andres Reyes: IT'S OK:)
- [17.45.39] Rijendra Thapa: me juss online
- [17.45.46] Rijendra Thapa: after getting disconnected
- [17.45.50] Adriano Autino: i think however we did our best to catch and integrate the comments we had during teh first two days
- [17.45.58] wheatsheaf1: you work hard AA (and Kim), well done and thankyou
- [17.46.12] Adriano Autino: thank you
- [17.46.33] Adriano Autino: the resolution is made of three parts:
- [17.46.36] Adriano Autino: 1. Summarizing the achievements of the SRI First Congress
- [17.46.39] Sergio Lebid: Excelent excellent work Adriano and Kim!
- [17.46.48] Adriano Autino: 2. Political guidelines emerging from the congress, for our public outreach viral campaign
- [17.46.53] Jesús Raygoza: Kim, I am here.
- [17.47.05] Adriano Autino: 3. The three projects, to balance our communication
- [17.47.16] Adriano Autino: so, part 1.



[17.47.35] Adriano Autino: Approaching the conclusion of our first international congress, we can say that our tenacity and patience, to

hold this congress, though just online, was prized, in terms of participation and high quality of the discussion we had.

Such a high level of discussion allowed us to get several relevant achievements, in theory and in practice, with some new organizational structures, which began to work in these two weeks, even before the congress was completed!

[17.48.25] Adriano Autino: we were right to decide to hold this congress, that takes place in a very critical moment, while the Space Shuttle is making its last flight

[17.48.37] Adriano Autino: and many commenters say this is a milestone

[17.48.41] Adriano Autino: the end of an age

[17.49.06] Adriano Autino: i think our congress centered the matter, and we are on the edge of events, indeed!

[17.49.26] CommanderCatalina: It is the dawn of the new age

[17.49.28] Adriano Autino: In summary, we were able to identify some key items, to be addressed in our outreach communication effort:

[17.49.50 | Edited 17.50.04] Adriano Autino: 1. fighting the abysmal lack of knowledge and continuing misinformation around the most promising space industrial developments, such as Space Tourism and SBSP

[17.50.54] Adriano Autino: about that, this morning a nice (provocative) title came to my mind:

space tourists? no, we want to go to space to stay!

[17.51.03] Keith Henson: I have a short bit of news re beamed energy and NASA if there is interest

[17.51.31] Adriano Autino: i think we should issue our next press release on that...

[17.51.50] Kim Peart: Adriano making adress Keith

[17.52.14] Adriano Autino: Keith, are you available later? I am very much interested

[17.52.31] Keith Henson: no, doctor apt.

[17.52.52] Camilo Andres Reyes: I THINK WE ARE IN HE SPACE NOW, I MEAN...WITH THE ISS, HUMANS CAN BE IN THE OUTTER SPACE AS A RESIDENTS, NOT LIKE TOURIST

[17.52.57] Camilo Andres Reyes: [17.51] Adriano Autino:

<<< space tourists? no, we want to go to space to stay!

[17.53.37] Jesús Raygoza: I AGREE, CAMILO.

[17.53.55] Kim Peart: Adriano - do you have a suggestion

[17.54.09] Kim Peart: or do you wish to continue

[17.54.21] Jesús Raygoza: Yes, we ARE to STAY IN SPACE.

[17.54.30] Adriano Autino: Keith, could you please write your communication and send it to me via email?

[17.54.45] Adriano Autino: I will issue it at the end of this agenda point

[17.54.54] Adriano Autino: aa@tdf.it

[17.55.14] Kim Peart: Is that OK Keith?

[17.56.10 | Edited 17.57.19] Adriano Autino: second key item...

[17.56.44 | Edited 17.57.01] Adriano Autino: 2. bringing some rather neglected space topics to the public attention, such as space debris, human life and health protection against hard radiation in space and low/zero gravity, astrobiology in general, exoagricolture and exo-farming, Near Earth Asteroids capture and mining, all topics very relevant for a serious space settlement plan

[17.56.58] Kim Peart: Sean - yes - OK

[17.58.19] Camilo Andres Reyes: ACTUALLY, DO U REMEMBER THE APOLLO PROGRAMM?? DO U REMEMBER APOLLO

11??...WELL, WHEN THE CREW CAME TO EARTH, ONS OF THE FAMOUS PHRSES OF THE PRESIDENT OF THAT TIME

WERE: NOW U MAY POSSIBLE TO HUMANS LIVE IN THE SKIES (SPACE)

[17.58.23] Adriano Autino: may we keep comments for the first pause :)

[17.58.42] Camilo Andres Reyes: OK OK I AGREE

[17.58.57] Kim Peart: Yes Adriano -

[17.59.17] Kim Peart: Camilo - Adriano is making an address

[18.00.05] Adriano Autino: so, we have a number of topics which are very relevant for space settlement, that so far were not considered important enough, sicne the strategy was _not_ space stllement, but just science and exploration [18.00.20] Camilo Andres Reves: OK, SORRY:)

[18.00.51] Adriano Autino: in days 1 an 2 we discussed this aspect, and i think it is very relevant for our outreach and campaigns

[18.01.18] Adriano Autino: 3. enhancing the public awareness about the global civilization risk, paying special attention to the communication methods, and always associating this argument with our message of hope, pointing



out that this is a growth crisis for our civilization, while the birth of a Civilization spanning the Solar System is approaching

[18.01.47] Adriano Autino: we'll see in details later this point, that's a very key one

[18.02.25] Adriano Autino: 4. bringing a wind of innovation in the political / ideological environment, with our proposal to replace the obsolete ideologies of liberalism and socialism by astronautic humanism, based on compassion, exodevelopment, assuring abundance of resources for free and democratic civil development [18.03.17] Adriano Autino: this is very important too... in the post industrial world people is enough of teh current corrupted and cultural ignorant political leaderships

[18.03.40 | Edited 18.03.50] Adriano Autino: we have to propose another ideology, based on quality, no more on the old ideological memes

[18.04.33] Adriano Autino: 5. running a visionary project, the Virtual Orbital Space Settlement, that will be able to catch the imagination and raise hope in the future into the true heritage of humanity: the children of the Earth 6. running two other projects, the Civilization Risk Assessment & Management and spotting the Best Space Business Industrial Development, to engage researchers, universities and students in the urgent needs of our civilization, to step over the current global crisis and finally aiming high again

[18.05.11 | Edited 18.05.23] Sean Stranglove Con: gentlemen

[18.05.14] Sean Stranglove Con: i will be back

[18.05.30] Adriano Autino: the above are the 6 main achivements of our congress, and will be our track, during the next four years

[18.05.59] Adriano Autino: with the proposal to raise public and private investments in the new spee industry

[18.06.03] Sean Stranglove Con: need food

[18.06.09] Adriano Autino: ok Sean

[18.06.30] Adriano Autino: The congress also allowed us to make some essential organizational improvements, giving birth to two very important committees:

[18.06.55] Adriano Autino: the SRI Executive Committee, that for the first time in our still brief history, can become the true direction for our international association

[18.07.17] Adriano Autino: the SRI Public Relations Committee, that is already drawing its Plan, and in these days sent our first Press Release to a relevant number of media and agencies

[18.08.27] Adriano Autino: Walt Putnam couldn't be with us today, but he made a great work, sending our press release for the first time to a big number of media

[18.08.51] Camilo Andres Reyes: ok

[18.09.20] Adriano Autino: The large interest arrised from our congress inspired many new supporters to join us, especially from the South East regions, such as India, Nepal, Malaysia, and others. The founding nucleus of the SRI India Chapter has been born,

[18.09.47] Jesús Raygoza: Those 6 points are very well, Adriano. Regarding Point 5As the Space Theme Park may be established near Guadalajara, I will be pushing for a kind of Virtual Orbital Space Settlement. Regular citizens may be able to get pulled by images to get a better idea on what is for humans to live in Space.

[18.09.52] Rijendra Thapa: yeah You are right Adriano

[18.09.54] Adriano Autino: Rijendra is one of those students, and I am very happy to have him with us today!

[18.10.19] Rijendra Thapa: thank you verymuch Adriano

[18.10.27] Camilo Andres Reyes: ;)

[18.11.06] CommanderCatalina: I would also like to welcome Camilo from Columbia

[18.11.14] Adriano Autino: I think Thilina, from Sri Lanka, will be happy too, since he's working restelessly since several vears in that region

[18.11.35] Camilo Andres Reyes: Thanks:)

[18.12.16 | Edited 18.12.53] Adriano Autino: yes, Camilo, and Rijendra, we hope you will be the first ranks of the SRI members in the emerging countries, that are manifesting an incredible enthusiams for space and astronautics!!!

[18.12.22] Adriano Autino: (clap)

[18.13.00] Kim Peart: Are you still holding the floor Adriano

[18.13.02] Camilo Andres Reyes: thank you so much

[18.13.05] Adriano Autino: yes

[18.13.24] Adriano Autino: just few more points, then we can make a first pause for comments

[18.13.37] Rijendra Thapa: we are working hard Adraino

[18.13.47] Camilo Andres Reves: ok, let's continue adriano

[18.13.58] Adriano Autino: After this congress, the SRI is stronger then before, and this is not to be measured only by membership and active support, but also in our increased capacity to agree on methodologies and to take initiatives in a team spirit.



[18.14.29] Adriano Autino: And maybe it is not a case that we are celebrating our first congress while the Shuttle Atlantis is flying for the last time. As many newspapers are writing, this the end of an age: the age of space used for Earth.

And a new age is beginning: the age of the space used for human development outside Earth, or exo-development.

[18.14.41 | Edited 18.17.30] Adriano Autino:

The age of Space Renaissance

[18.15.26] Camilo Andres Reyes: :)

[18.15.31] Adriano Autino: what we are saying. the past 40 years space was used mostly to support the Earth's business (telecommunication)

[18.15.45] Camilo Andres Reyes: i think all of us can assume the risk, I think:)

[18.15.57] Adriano Autino: now the age of exo-development is beginning

[18.16.16] Adriano Autino: we have to addrees the outer space, and settle overthere

[18.16.49] Adriano Autino: ok, this was the summary, any comments?

THE FINAL RESOLUTION REPORT (PART 1) - OPEN DISCUSSION

[18.17.04] Kim Peart: Open for comments

[18.18.18] Kim Peart: Thanks Adriano - much work

[18.18.20] Jesús Raygoza: Friends. Suddenly, I have to lave for a while. To come back soon, I will do as much as I can do. In case I cannot come back on time. Tomorrow, it will be possible to stay with you. Thanks!

[18.18.23] wheatsheaf1: very good AA. As Peter Diamandis said in a TED talk a few years ago, there are 3 motivations for space development: 1. curiosity 2. fear of global disasters 3. profit. All three can be addressed by SRI philosophy

[18.18.50] Kim Peart: Thanks Jesus

[18.19.14] Adriano Autino: yes Rob. You hit the point!

[18.19.24] Adriano Autino: Ciao Jesus, i hope you can be back

[18.19.46] Anton Volkonskiy: The most important is to develop new kind of engine/propulsion

[18.19.59] Krahazik Dragon: agreed Anton

[18.20.05] Camilo Andres Reyes: I agree with digger

[18.20.20] Rijendra Thapa: Yeah i very much agree with Rob

[18.20.37] Anton Volkonskiy: chemical engine will not let us enough ...

[18.20.51] wheatsheaf1: agreed anton, but at the same time we must create and maintain a momentum of interest in the publics mind. curiosity, fear, profit

[18.21.16] Camilo Andres Reyes: i think while we still using the same propulsion system is complicated to get beyond

[18.21.23] Adriano Autino: the mission of SRI is to raise the public awareness about the urgence of the exodevelopment

[18.22.08] Adriano Autino: it doesn't need to invent quite new technologies... do you remember X33?

[18.22.30] Adriano Autino: it was a concentrate of sci-fi technologies, it costed billions, and never fllew

[18.22.49] Adriano Autino: it was retired by NASA in 2001 (if i remember well)

[18.23.07] Camilo Andres Reyes: ohh ok ok

[18.23.22 | Edited 18.23.32] Adriano Autino: i think SpaceComposites, SpaceX, and others, are working woth existent and almost existent technologies

[18.23.44] Adriano Autino: and our task is to support their efforts...

[18.23.55] CommanderCatalina: http://www.facebook.com/event.php?eid=185973411459145 if you are on facebook attend this webinar, Aerojet will be building an ion propulsion engine

[18.24.11 | Edited 18.24.49] Adriano Autino: showing to the people that they have an high social role, not just for their profit...

[18.24.25] Camilo Andres Reyes: thanks for the site commander:)

[18.25.05] wheatsheaf1: I had a thought for our PR committee...

[18.25.21] Adriano Autino: this generation of space entrepreneur, are our social reference...

[18.25.33] Rijendra Thapa: yeah i agree this may be the better way to make people more interested Adriano

[18.25.40] Adriano Autino: they work for profit, but they also have an ethical concept of enterprise

[18.25.55] Kim Peart: Yes Rob

[18.27.02] wheatsheaf1: a simple thing occurred to me, that we might engage in supporting such things as sci-fi popular media such as star trek movies by petitioning them to continue production.

[18.27.34] Adriano Autino: @Rob, an excellent idea!

[18.27.44] Adriano Autino: it's esy to raise cause on facebook



[18.27.46] Neda Ansari: I sat with chief engineers from Aerojet at the last ISDC Governors Gala while we talked about ion propulsion - Beigelow was talking about the same. IP seems to be the trend these days.

[18.28.15] wheatsheaf1: it would just add to the weight of opinion in the public's mind, keep the idealistic notions out there amongst them

[18.29.04] Sergio Lebid: Great idea Rob! I am in the process of securing one of the Star Trek actors who happens to be very enlightened and a PhD to join us and promote our efforts. She is a wonderful person!

[18.29.31] Kim Peart: Rob - as sets are built - we can make documentaries and movie stories in Second Life too

[18.29.33] wheatsheaf1: @serg - cool

[18.29.48] Camilo Andres Reyes: WOW, IT'S GREAT....IT'S A WONDERFULL IDEA

[18.29.50] wheatsheaf1: @kim - yep

[18.29.54] Adriano Autino: just one recomendation: any public action we begin, please sign it as Space Renaissance International! (we have to be everywhere)

[18.30.13] wheatsheaf1: @adriano - absolutely agree

[18.30.14] Sergio Lebid: Definitely Adriano!

[18.30.15] Kim Peart: That would be fantastic Sergio

[18.30.24] Camilo Andres Reyes: AGREE

[18.30.34] Neda Ansari: Sergio, what's the name?

[18.30.42] Sergio Lebid: I should know in the next week.

[18.31.18] Sergio Lebid: Neda, I will advise with her permission after we are in mutual agreement.

[18.31.28] Adriano Autino: we have the message from Keith, i think it is pertinent with this discussion

want to see it?

[18.31.39] Sergio Lebid: yes

[18.31.44] Rijendra Thapa: yeah

[18.31.45] Camilo Andres Reyes: YES

[18.31.50] Adriano Autino:

Keith Henson's address

This is something that has not been covered by news nor (as near as I can tell) has it been the subject of a press release. But it is fairly well known to those in the business.

NASA Ames brought a 1.2 MW, 110 GHz gyrotron for testing beamed energy propulsion. They still need the power supply, which is 70 kV at 30 A but it's a relatively small cost compared to the gyrotraon. Up close it will provide well over 10 MW/m2.to test hydrogen heaters.

They intend to offer the use o it the same way as the wind tunnels, as a national engineering test asset.

I think it is an accepted truth that you need single stage to orbit and that it must be a reusable launch vehicle to get the cost to GEO down to where power satellites make sense economically.

Given the current state of material science and the best exhaust velocity you can get from chemical propulsion, neither of these are feasible.

To put numbers on the problem, it takes 9000 m/s to get into LEO. For 4500 m/s rocket engines, that's a delta V of twice the exhaust velocity. The rocket equation gives a mass ration of 7.4 which means the vehicle and payload can't be more than 13.5% of the takeoff mass. For a vehicle to be reusable, the accepted minimum structure is 15%, leaving less than zero for payload. (Skylon cheats by burning air partway up, but it's not enough to get a lot of payload to LEO.)

But if you have 9000 m/s exhaust velocity, which can be done with hydrogen heated with microwaves or lasers, then the mass ratio is a little less than 3. So vehicle and payload can be 36% of takeoff mass. If half vehicle and half payload, that's 18% each. So a 300 ton vehicle with a dry mass of 54 tons could put 54 tons in LEO.

The falling cost of microwave power and laser power makes these options possible.

Beamed energy propulsion doesn't make economic sense unless you are talking cargo volumes in the hundreds of thousands of tons per year.

I should also add that I never thought NASA would do something so sensible. Those of you who know Pete Warden might send him a thank you note..

Keith Henson



- [18.31.52] wheatsheaf1: @serg nice work
- [18.31.56] Kim Peart: Definitely
- [18.32.30] Sergio Lebid: Thanks Rob, we are all for one and one for all at SRI!
- [18.32.31] Krahazik Dragon: could establish branch or sattalite offices in popular virtual worlds as an extension to the outreach and RP process
- [18.32.38] Neda Ansari: Sounds good Sergio & that is wonderful if she could join.
- [18.32.56] Camilo Andres Reyes: WAIT A MINUTE PLZZ
- [18.33.06] Sergio Lebid: Thanks Neda
- [18.33.43] wheatsheaf1: another idea for PR...
- [18.34.21] Camilo Andres Reves: OK
- [18.34.46] Adriano Autino: we'll put the Keith's message in the acta of the congress, and keep it as material for our further elaboration and outreach
- [18.35.00] Sergio Lebid: agreed
- [18.35.17] Camilo Andres Reyes: AGREE
- [18.35.36] Adriano Autino: all the ideas proposed here should be conveied to the PR Committee
- [18.36.01] Sergio Lebid: agreed
- [18.36.03] C.A. Chicoine: Hello, I've been reading from the side-lines. :) I'd like to comment on what Rob brought up regarding sci-fi and popular media. Perhaps a coalition of writers could be formed with the conscious effort to promote SRI?
- [18.36.39] Adriano Autino: C.A. that would be great!
- [18.36.42] Kim Peart: Adriano as Keith suggests if we know Pete Warden SRI could contact him
- [18.37.02] Camilo Andres Reyes: BUT IS IT POSSIBLE??
- [18.37.49] Xavier Alabart: I will suggest going via Gary Martin which also is at NASA Ames, he tends to be very open minded
- [18.37.52 | Edited by Adriano Autino, 18.38.54] wheatsheaf1: merchandising I go to lots of meetings for many astro societies etc and talks to the public. SRI stickers/merchandise would be good to distribute [A.I.]
- [18.37.53] Adriano Autino: C.A., are you already in the PR Committee?
- [18.38.22] Rijendra Thapa: rob has a nice point
- [18.38.38] C.A. Chicoine: Adriano, no I am not on a committee.
- [18.38.49] Kim Peart: Cachicoine Excellent thought the Second Life SRI movie house could go viral
- [18.38.53] Sergio Lebid: Great idea Rob
- [18.39.23 | Edited 18.39.53] Adriano Autino: C.A. will you accept to join the SRI PR Committee? [A.I.]
- [18.39.23] wheatsheaf1: @kim and others second life SRI brilliant idea
- [18.39.33] C.A. Chicoine: Yes. :)
- [18.39.41] Adriano Autino: excelletnt!
- [18.39.52] Kim Peart: Welcome
- [18.39.59] Sergio Lebid: Great
- [18.40.12 | Edited 18.40.25] Adriano Autino: Rob, you are in the PR Committee, right?
- [18.40.13] Camilo Andres Reyes: WOW
- [18.40.31] wheatsheaf1: me??? no, no experience at all
- [18.40.42] Adriano Autino: ok, but you have ideas, man!
- [18.40.53] wheatsheaf1: ideas are the easy part
- [18.40.53] Adriano Autino: so please join the committee :)
- [18.40.56] Sergio Lebid: Rob, you great ideas qualify you!
- [18.41.02] Sergio Lebid: your
- [18.41.16] Rijendra Thapa: Sergio
- [18.41.24] Rijendra Thapa: i agree with u
- [18.41.45] wheatsheaf1: I suffer from lack of self confidence having only *very* recently come to the astro/space sector later in life. I doubt my own abilities.
- [18.42.00] CommanderCatalina: pete.worden@nasa.gov
- [18.42.26] Sergio Lebid: Rob, we do not doubt your abilities and we will help each other learn and grow and progress!
- [18.42.27] Adriano Autino: Rob, don't be shy, the committee is learning how to develop the SRI outreach...
- [18.42.41] Krahazik Dragon: I have doupts baout my own participation and worth
- [18.42.41] Adriano Autino: we have professionals in it
- [18.42.50] Camilo Andres Reyes: WE CAN HELP EACH OTHER
- [18.42.52] wheatsheaf1: OK, you asked for it! I'm in, thankyou.



[18.42.58 | Edited 18.43.04] Adriano Autino: great! [A.I.]

[18.43.03] Sergio Lebid: Great! [18.43.24] Kim Peart: Welcome Rob [18.43.31] wheatsheaf1: tnx kim

[18.43.36] Adriano Autino: well, i am marking the action items, that will be easier to find them...

[18.44.04] Adriano Autino: I think we can proceed, mr. chairman, or will come too late...

[18.44.25] wheatsheaf1: brb

[18.44.28] Kim Peart: Yes Adriano - the next item

[18.44.37] Camilo Andres Reyes: YES

THE FINAL RESOLUTION REPORT (PART 2)

[18.44.43] Adriano Autino: 2. Political guidelines emerging from the congress, for our public outreach viral campaign

[18.45.08] Adriano Autino: so the first pollitical guideline is fighting misinformation

[18.45.27 | Edited 18.45.32] Adriano Autino: i will go through the main points as quick as i can

[18.45.35] Camilo Andres Reyes: OK

[18.45.44] Adriano Autino: The privatization of space - key to open the high frontier

[18.45.56 | Edited 18.46.08] Adriano Autino: We keep on reading and observing in the media, superficial and misleading opinions about space tourism.

According to these views, space tourism would be a kind of very expensive amusement for rich people. Some of these opinions charge space tourism with immorality in a time of crisis, as a waste of money and valuable resources.

[18.46.34] Adriano Autino: Since we don't only talk inside the space community, we shall develop a wide popular campaign, against such positions, focusing on commonsense with public opinion, the key elements of which are the following.

[18.47.02] Adriano Autino: I think you all know here the young history of space tourism

[18.47.25] Adriano Autino: yes i am talking about history, and not pre-history, neither sci-fi

[18.47.48] Adriano Autino: history begins in 1996, with the x-prize, made by Diamandis and Mariniak

[18.48.01] Adriano Autino: no need to explain, i think

[18.48.24 | Edited 18.48.33] Adriano Autino: in 2004, ScaledComposites won the game, and changed the paradigm

[18.49.18] Adriano Autino: Burt Rutan and Jim Benson demonstrated that they can develop a spacecraft, two stages both recoverable, with less than 30 million

[18.49.31] Adriano Autino: yes, it is a suborbital, of course

[18.50.06] Adriano Autino: but it retakes the path interrupted when the X15 project was canceled by NASA, in favour of Space Shuttle and spendable rockets

[18.51.08] Adriano Autino: I guess the youngs among us could be listening for the first time to our reconstruction of the history of astronautics, and to our criticism to the space policiy

[18.51.31] Adriano Autino: this is something we at SRI, and before, we discuss since at least 10 years

[18.51.59] Adriano Autino: and a large literature can be found on the SRI website, and on SpaceFuture.com

[18.52.30] Adriano Autino: however, back to the point, SpaceShipOne demonstrated that the low cost access to space is feasible

[18.52.37] wheatsheaf1: Peter Diamandis TED talk about imperative to go to space:

http://www.ted.com/talks/lang/eng/peter_diamandis_on_our_next_giant_leap.html

[18.52.47] Adriano Autino: and triggered the crisis of the big agencies

[18.53.05] Adriano Autino: just one flight of the shuttle costs 500 million...

[18.53.22] Adriano Autino: privatization is the key word

[18.53.45] Adriano Autino: SpaceX, Bigelow, Virgin Galactic are following that path

[18.54.20 | Edited 18.54.33] Adriano Autino: When we wrote our book "Three Theses for the Space Renaissance", the number of companies in the new space industry has grown by one magnitude, from 20 companies in 2004 to more than 100 and some of them (Virgin galactic) are well positioned to develop the suborbital tourism industry. Others, such as Bigelow and

SpaceX, aim directly for the Earth Orbit market, developing inflatable hotel accommodation and low cost orbital vehicles.

[18.55.01] Adriano Autino: our key point, to be repeated each time we have the possibility:

[18.55.09] Adriano Autino: Space Tourism, starting at suborbital and progressing to orbital, is the business segment that can progressively grow, accumulating capital for progressively improving the technologies, until a fully Reusable Launch Vehicle is achieved.



[18.55.54] Adriano Autino: it means that ST, if there where time enough, could open the frontier alone, with the sole power of the growing market.

[18.56.30] Adriano Autino: growing the market, the price of tickets will decrease, and boost the market as a feedback effect

[18.56.45] Adriano Autino: but there's not time enough

[18.57.14 | Edited 18.57.22] Adriano Autino: this awful crisis menaces to crash the gloabl economy and kill any hope to go anywhere

[18.57.35] Adriano Autino: that's why we call for the help of the politics

[18.57.50] Adriano Autino: and we do not reject the government support

[18.58.04] Adriano Autino: for that we need to raise the public awareness

[18.58.24] Adriano Autino: Second theme

[18.58.28] Adriano Autino: Space Based Solar Power - key to the Space Development

[18.59.27] Adriano Autino: If Space Tourism is the preferred ideological target of backward-thinking anti-capitalist ideologists, SBSP is the preferred target of vested interests in oil and other well-entrenched energy lobbies.

[18.59.32] Keith Henson: I think if you work the numbers, space tourism will not work, not for SpaceX at 2000/kg and not even with the power sat transport beamed energy propulsion that I think can get down to \$100/kg. I tried *hard* and could not make a case for a significant business. Sorry

[19.00.00] Keith Henson: gotta go

[19.00.20] Adriano Autino: Keith, there are market studies giving high projections to ST

[19.00.46] Adriano Autino: a market of 1 trillion / year in few years, when it will really take off

[19.01.17] Adriano Autino: ST will become the first industrial development line, in the globalized economy

[19.01.33] Adriano Autino: please check spacefuture.com Patrick Collins's papers

[19.02.11] Keith Henson: wishing it will not make it so. If I had time I could show you in a few minutes

[19.02.22] Krahazik Dragon: Ther eis already company which has been doing business in space tourisim, even before Space SHip One mad eits award winning flight.

[19.02.25] Krahazik Dragon: Sapce Adventures

[19.02.52] Kim Peart: Adriano - do you still hod the floor?

[19.02.58] Adriano Autino: yes

[19.03.24] Adriano Autino: this is the longest part of the report, i have to go streight ahead

[19.03.45] Camilo Andres Reyes: continue

[19.03.52] Adriano Autino: however, SpaceShipTwo should be ready to start flying, nowadays, we will see

[19.04.09] Adriano Autino: so, we were beginning the SBSP point

[19.04.28] Adriano Autino: there are many false perceptions to be demistified

[19.04.42] Adriano Autino: Energy beams from space have been the subject of endless conspiracy theories and withering scrutiny, despite a 2009 NASA study that concluded microwaves from space would be slightly less intense than the Sun's rays and would pose no danger to people.

[19.05.40] Adriano Autino: We discussed, during day 1 and day 2, the danger that SBSP could be just a new Earthly space business, as telecommunication satellites were for the past 40 years

[19.06.07] Adriano Autino: just relaunching the spendable rockets, instead of developing RLVs

[19.06.27] Adriano Autino: Dr. Feng Hsu argumented it is not possible

[19.06.35] Adriano Autino: since SBSP needs RLV, to develop

[19.06.54] Adriano Autino: it could never be financially competitive using spendable rockets

[19.07.28] Adriano Autino: The earthly photovoltaic industry stays on the market only because

of government incentives: when the money runs out, such industries fail and many people are jobless again.

[19.08.01] Adriano Autino: In the energy field, nothing is financed if it was never done before

[19.08.24] Adriano Autino: We also need to consider how to promote SBSP, where there is an immense quantity of technical and engineering work to be done. People tend to undervalue the effort required. Consider that nothing has been sent into orbit, so far, in the field of energy and nobody funds anything that is not already demonstrated as a working option...

[19.09.06] Adriano Autino: Considering the very huge effort still to be made to fly demonstrators and then building the first operative plants, this is still mainly a matter for governments and international cooperation.

[19.09.17] Adriano Autino: After throwing so much public money out the window (absurd military expense, just for an example), this would be a very worthwhile use of public funding.

[19.09.41] Adriano Autino: Having achieved the low cost access to orbit, establishing space based solar plants is the logical next step, in the direction of exo-industry development.

[19.10.02] Adriano Autino: We should make it definitely clear, that the space solar plants are indispensable to all space development in the Geo-Lunar space region.



[19.10.14] Adriano Autino: The SBSP stations will fuel hotels, industrial orbiting platforms, and ion-propulsion passenger and cargo vehicles for any destination.

[19.10.31] Anton Volkonskiy: wey need some kindf slingshot =)

[19.10.38] Anton Volkonskiy: we may

[19.11.02] Adriano Autino: [19.10] Anton Volkonskiy:

<<< some kindf slingshot =)please say it in plain words...

[19.12.03] Sean Strangelove Con: back

[19.12.31] Kim Peart: Is the case for an Earth-based electromagnetic mass driver closed?

[19.12.47] Anton Volkonskiy: we combine different kinds of ways of putting enough energy into the spacecraft... F.ex. Gauss cannon + SFR + LFR to get to the orbit

[19.13.41] Adriano Autino: I appreciate it, Anton, but I wonder how many of us can follow you...

[19.14.10] Adriano Autino: this could be a subject for an outreach paper, maybe?

[19.14.22] Anton Volkonskiy: probably

[19.14.24] Adriano Autino: (i for first need to be outreached:))

[19.14.30] Sergio Lebid: Thank you Anton!

[19.14.47] Adriano Autino: so, back to point

[19.14.56] Adriano Autino: Without SBSP, no exo-development program can happen.

[19.15.09 | Edited 19.15.18] Adriano Autino: If directed to Earth rectennas, the SBSP energy will also contribute to solve the energy problems on Earth, though this may not be the main goal.

[19.15.39] Adriano Autino: Our vision is strongly projected outward and upward, and shall be communicated everywhere, always countering any Earth-centric view that would confine SBSP to Earth use alone.

[19.16.05] Adriano Autino: what we have to start thinking, is outside

[19.16.18] Adriano Autino: this is the main philosophical effort, of the SRI

[19.16.32] Adriano Autino: go over the pre-copernican vision of the world

[19.16.59] Adriano Autino: think about a greather house, over the Moon orbit, including the Earth magnetosphere, at least

[19.17.14] Adriano Autino: that includes the Lagrange points as well, and many many NEAs...

[19.17.36] Adriano Autino: always refer to that environment, at least

[19.17.54] Adriano Autino: likely we are not yet able to think ourselves in the Mars orbit, yet

[19.18.06] Adriano Autino: maybe our nephew will be

[19.19.26] Adriano Autino: however, to settle in the Greater Earth, we do need Solar Power Space Plants

[19.19.29] Adriano Autino: definitely

[19.20.48] Adriano Autino: I call it exo-development, retaking a terminology initiated by Krafft Ehricke in his papers "The Extraterrestrial Imperative"

[19.21.09 | Edited 19.21.27] Adriano Autino: Few words to explain the meaning of the term 'exo-development'. We could use 'space development', and maybe within our community it would be clear enough, but I think exo-development is more appropriate: when people will ask what we mean, we will have a chance to develop our discourse.

[19.21.52] Adriano Autino: 'Exo-development' means human industrial development out of Earth, while the term 'space development' was used traditionally for any space business, including the telecommunication satellites during the 40 years of use of space for Earth.

[19.22.03] Stephanie Lynne Thorburn: These concepts and ideas are fairly concrete and rational for space advocates, but may be fictional sci-fi goals as far as the public consciousness is concerned still. I think all the SRI's initiatives excellent- but a greater focus on environmental contribution and social need, (whether sometimes earth orientated or not), would make the theories more appealing. Other financial priorities in recession are also constantly likely to interfere with government support of exo-development.

[19.22.14] Adriano Autino: Exo-development means use space for human development outside Earth, the new strategy, as Jeff Greason indicated clearly. According to David Dunlop, NSS is talking about bootstrapping the exo-development too.

[19.22.24] Sean Strangelove Con: ladies, gentlemen, and chair, i have a small problem, and i can not continue. it is not large, but need to be afk. i apologise, i will be back tmorrow

[19.22.44] Adriano Autino: ok Sean, see you

[19.23.06] Adriano Autino: @Stephanie, yes, but even the emvrionmental matter is to be seen in a larger dimension

[19.23.39] Adriano Autino: enovironment is not just Earth's surface, but also the orbit, the Moon, the asteroids...

 $[19.24.05] \ Adriano \ Autino: we have to learn \ mastering \ such environment, \ and \ take \ care \ of \ it, \ as \ we \ shall \ do \ with \ earth$

[19.24.09] Kim Peart: Thanks Sean



[19.24.28] Adriano Autino: moving our development outside, we will help Earth to recover from the burden of our development

[19.24.36] Kim Peart: Adriano - discussion ensuing?

[19.25.41] Adriano Autino: Mr. chairman, Stephanie made a comment... it is also true that the next points will also answer to her comment, in some way

[19.26.04] Stephanie Lynne Thorburn: @ Adriano. Indeed, but the public do not perceive in such a lateral manner the environmental problem. I think this needs to be a graded plan of exposure to SRI plans or it may seem too unrealistic or removed from present reality toward a new future philosophy.

[19.26.32] Adriano Autino: @Stephanie, I also know that our message is for many aspects against the current, and our dity is to explain it as better as we can, not to follow the current

[19.26.54 | Edited 19.27.25] Adriano Autino: the current policy and philosophy led the civilization into the current awful situation

[19.28.03] Neda Ansari: Rob, any positive thoughts, please interject.

[19.28.04] Adriano Autino: i am not saying we should not support the use of SBSP for Earth...

[19.28.06] wheatsheaf1: I have 4 points to offer for discussion/opinion...

[19.28.21] Stephanie Lynne Thorburn: @Adriano. We need to be careful how to convey ideas so they are accepted and likely to emerge into fruition in relation to public support. So a careful discourse of plausible, new and ambitious ideas is best to work against the predominant paradigms.

[19.28.27] wheatsheaf1: is AA finished for now?....

[19.28.36] Adriano Autino: but we shall always recall that its main use is for the space

[19.28.50] Adriano Autino: Rob... er, not yet

[19.29.07] Kim Peart: Adriano - would you like to complete your points?

[19.29.33] Adriano Autino: yes, i'll try to go quickly... i have an eight pages repot ((whew)

[19.29.45] Adriano Autino: didn't have time to shorten it...

[19.29.51] Adriano Autino: however

[19.30.01] Adriano Autino: 2.2. Raising public attention on some disciplines essential for Space Development

[19.30.07] Camilo Andres Reyes: well guys, I gotta go

[19.30.16] Camilo Andres Reyes: but be right back later

[19.30.20] Camilo Andres Reyes: have a good time

[19.30.23] Adriano Autino: Ciao Camillo, thanks for being with us

[19.30.25] Camilo Andres Reyes: God bless ya all

[19.30.26] Camilo Andres Reyes: cyaa

[19.30.35] Kim Peart: Farewell Camilo

[19.30.48] Camilo Andres Reyes: thanks....byeee

[19.30.52] Sergio Lebid: Ciao Camilo

[19.30.59] Adriano Autino: i'll just cover the titles of this section, i think there will not be much to discuss

[19.31.25] Adriano Autino: 2.2.1. Space debris

[19.31.47] Adriano Autino: 6000 tonns of debris are a danger for increasing astroanutic flights

[19.32.18] Adriano Autino: and are a huge richness (about 120 billions) that could be partially reused

[19.32.37] Adriano Autino: instead of being burned in the athmposphere

[19.32.48] Adriano Autino: 2.2.2. Human life and health protection against space hard radiations and low/zero gravity

[19.33.09] Adriano Autino: if we are serious with a space settlement plan, these disciplines shall be boosted

[19.33.27 | Edited 19.34.23] Adriano Autino: as all exo-biology, exo-agriculture, exo-farming

[19.33.39] Adriano Autino: 2.2.3. Near Earth Asteroids capture and mining

[19.34.00] Adriano Autino: the delta V needed to reach some NEAs is surprisingly low

[19.34.02] Kim Peart: "Exo-farming"

[19.34.17] Adriano Autino: yes, thank you Kim:)

[19.34.39] Adriano Autino: easier than what people thinks, we shall say it, and argument it

[19.35.08] Adriano Autino: NEA mining could be earlier that what people think, and boost the construction of space infrastructure

[19.35.19] Adriano Autino: 2.3. Heralding a new breeze of innovation in the political / ideological environment

[19.35.37] Adriano Autino: here i have to spend few more words

[19.35.55] Adriano Autino: As we wrote in our Issue I for this congress, we keep on voting for collectivist or liberist utopias, but we are expected to be satisfied by real socialism and real liberalism, both of which have famously failed, as demonstrated by a long series of terrible catastrophes. The current political leaderships of our globalized society are demonstrably inadequate to the challenges now being faced.



[19.36.21] Adriano Autino: We said we want to replace those obsolete ideologies – that have repeatedly demonstrated their tragic inadequacy – with a brand new ideology: astronautic humanism, based on compassion for all humans and for all the sentient beings.

[19.37.08] Adriano Autino: Basing on a virtually infinite resources platform, AH is the sole ideology that can propose a feasible utopia

[19.37.36] Adriano Autino: to

develop a Solar Civilization of thousand trillions human beings, a wide free market of thousands trillions, a multicultural society based on millions of communities, each one developing their preferred values and cultural diversification, able to exchange their experiences and achievements, toward a true human status, though bodies shapes and physiologies will of course progressively differ.

[19.37.48] Adriano Autino: Counting on the trillions comets made of ice and basic life components, and orbiting around our Solar System in the immense Oort Cloud, our offspring will never die of starvation or thirst.

[19.38.12] Adriano Autino: will never seek to impose any "ideal social model" to anybody, since the immense resources of the Solar System, the Kuiper Belt and the Oort Cloud, will allow an endless democratic revolution, and the conditions of scarcity of resources that favour the growth of bureaucratic powers will never rise again in human history.

[19.38.42] Adriano Autino: it means all communities will be free, for the first time in history, to develop their preferred social model

[19.38.58] Adriano Autino: The history of the past demonstrates that, more than the social model, the moral qualities of the leaders are highly relevant in human communities and national governance.

[19.39.21] Adriano Autino: Orbiting cities and islands in space will favour self-government and direct democracy, much more than large nations. It could be in space communities that humans will find again, in another environmental dimension, the human sized relationships, where each one is appreciated and respected for their abilities.

[19.39.55] Adriano Autino: a social environment in which each one can aim and get what their imagination can conceive and where the people with less imagination will not need to be angry and jealous, since the general abundance of resources will allow everybody to share everything.

[19.39.57] Adriano Autino: That kind of society is likely the nearest thing to a society where people will have the realization of their own happiness.

[19.40.27] Adriano Autino: the above is just the tentative to start going over those few words: replacing the obsolete ideologies

[19.40.42] Adriano Autino: is just a seed

[19.41.04] Adriano Autino: think about evolution of the concepts...

[19.41.19] Adriano Autino: in a context of endless abundant of resources...

[19.41.34] Adriano Autino: ok, going to the end

[19.41.55] Adriano Autino: 2.4. Is this the end or the beginning of the space age?

[19.42.19 | Edited 19.42.25] Adriano Autino: On June 30th The Economist published an article titled "The end of the Space Age: Inner space is useful. Outer space is history", www.economist.com/node/18897425.

[19.42.55] Adriano Autino: that article sounds particularly insulting for astronautic humanists...

[19.43.29] Adriano Autino: The article postulates simply that, with the last flight of space shuttle Atlantis, the space age has ended.

"Space tourism" says the article "is a luxury service that is, in any case, unlikely to go beyond low-Earth orbit at best (the cost of getting even as far as the moon would reduce the number of potential clients to a handful).

The other source of revenue is ferrying astronauts to the benighted International Space Station (ISS), surely the biggest waste of money, at \$100 billion and counting, that has ever been built in the name of science."

[19.44.05] Adriano Autino: The article also says that space -- the inner space, inside Earth Orbit – worked greatly for Earth business during the last 40 years: exactly as we say in our analysis: the satellite age was excellent for earthly business, but not for astronautics and not for the advancement of human civilization!

[19.44.23] Adriano Autino: How to answer to lobbyists and ideological adversaries?

[19.44.32] Adriano Autino: One of our main tasks is: how to answer the Economist.

[19.45.00] Adriano Autino: should we try to answer just on the basis of the Earth business, we would fail

[19.45.24] Adriano Autino: If we want to be effective, and catch the people's attention, showing the cultural ignorance of the economist's approach to global problems, we have to use our analysis of the Civilization global risk. [19.46.03] Adriano Autino: It was said, in our discussion: "despite the end of world forecasts of the catastrophists, the world is always spinning around in the cosmos". It was also proposed that we should point out more of the positive aspects of our proposals, in order not to scare people.



[19.46.28] Adriano Autino: However, we shall consider (see the book "Three Theses for the Space Renaissance", chapter "The Status of Civilization") that we are living in unprecedented times, characterized by the global extension of several social and physical processes:

[19.46.41] Adriano Autino: - the world never had seven billions inhabitants before

[19.46.49] Adriano Autino: - the world was never 70% industrialized

[19.46.56] Adriano Autino: - the world never had before repeated default of countries, such as Argentina, Ireland, Greece, Portugal, ...

[19.47.10] Adriano Autino: - the world has never before had a rate of "apocalypse size" disasters so high, e.g. tsunamis, earthquakes, hurricanes, oil spills (Gulf of Mexico 2010), nuclear accidents following earthquake and tsunamis (Japan 2011)

[19.47.21] Adriano Autino:

- the world has never before had a global economic crises like the current one, which started in 2008 and has yet to end

[19.47.31] Adriano Autino: Other growing concerns at this time include:

[19.47.46] Adriano Autino: - a global shortage of fish and other food resources (also due to use of agriculture for energy generation)

- a shortage of fresh water

[19.47.58] Adriano Autino: - global pollution and decay of the human living environment

- acidification of the oceans, due to excess of CO2 (also due to increasing use of coal by China for energy production) [19.48.14] Adriano Autino: Only the Space Renaissance has an explanation for the above. We call it the closed world syndrome. We are facing the incredible contradiction between a growing population, meaning potentially larger markets and at the same time a decrease of jobs!

[19.48.26] Adriano Autino: Such contradiction can be caused only by a general shortage of resources and energy! [19.48.54] Adriano Autino: yes, the world reached similar conditions -- though they were never global like nowaday!—it always kept on spinning; but how? By terrible wars and blood baths

[19.49.21] Adriano Autino: The risk of a global civilization (unrecoverable) crash is very real. This is nothing to be scared of, but a challenge that we can take on and fight against.

Astronautic humanists are dead against wars as a way to 'solve' the problems of the Earth and we have the good alternative: exo-development, in the outer space!

Nobody else promotes this analysis – except Stephen Hawking and a few others, mostly unheeded – and nobody else is proposing a global solution. We do, and shall keep on doing it, amplifying our voice many times.

[19.50.09] Adriano Autino: the above is the main nucleus of our understanding of the civilization situation, and is our duty to find the best ways and modes to communicate it

[19.50.47] Adriano Autino: we also have to discuss with other positions... but i'll go quickly, since they were discussed many times before this congress

[19.50.55] Adriano Autino: 2.4.2. The extreme ecologist position

[19.51.18] Adriano Autino: Their answer to the global metaphysical warming is to hide their head in the sand, to deindustrialize the world and decrease the economy (they call themselves supporters of the "happy decrease") and pray to the nature goddess to save their lives...

[19.51.49] Adriano Autino: another (more rare) category of ecologists, with those who include the solar system in their reflection, but just to say that we, humans, don't have the right to change the environments of the Moon or Mars and that we should leave them untouched

[19.52.04] Adriano Autino: Of course, we will discuss such a position, since nobody lives on the Moon or Mars, except maybe some viruses and/or simple vegetable form of life.

We can argue that comets and asteroids are quite volatile components of the Solar System, including the Oort Cloud System. The comets are subject to losing most of their mass, when they come near the Sun. Having asteroids with very unsteady orbits that are often captured by Jupiter and hurled into the inner solar system.

[19.52.41] Adriano Autino: However, our best positive way to talk about the crisis and the global risk is the metaphor of the Earth Pregnancy

[19.53.13] Adriano Autino: that gives the awareness of the risk (stillbirth), should the world remain closed

[19.53.30] Adriano Autino: and the hope of a very happy event: the birth of a solar civilization

[19.53.49] Adriano Autino: well, it was hard, but this is the end

ADJOURNING

[19.54.01] wheatsheaf1: (clap)

[19.54.06] Adriano Autino: of course please read the document with more tranquillity...



- [19.54.25] Anton Volkonskiy: (y)'
- [19.54.47] Kim Peart: And one day on the Sea of Tranquillity
- [19.54.57] Kim Peart: Discussion Adriano
- [19.55.07] Neda Ansari: That was great, as usual Adriano.
- [19.55.21] Adriano Autino: thank you friends, for your patience
- [19.55.44] Adriano Autino: it is not easy to give such a heavy paper... i took two hours...
- [19.56.13] Sergio Lebid: (clap)
- [19.56.22] Adriano Autino: maybe we can vote tomorrow on the final resolution, after everybody will have time to read it?
- [19.56.35] Adriano Autino: mr. chair, what do you think?
- [19.56.44] Kim Peart: Good suggestion Adriano
- [19.57.15] Sergio Lebid: Excellent Adriano! Thank you very much!
- [19.58.27] Adriano Autino: i tried to go over our discussion of days 1 and 2, taking profit of all the comments, in order to provide a kind of vademecum for our outreach work...
- [19.59.07] Adriano Autino: the acta of the congress will be made by the two issues, the final resolution and the transcript of all sessions
- [19.59.15] Kim Peart: Much work for the PR Committee now
- [19.59.20] Adriano Autino: yep!
- [19.59.34] wheatsheaf1: 8-|
- [19.59.46] Stephanie Lynne Thorburn: Excellent Adriano- you have a persuasive narrative ability and can counter the Economist, moreover, your vision also encompasses a re-write of fiction such as Huxley's 'Brave New World'. We do need a fundamental change and to entice the public to the SRI's mode of thinking, although there are some perspectives that are slightly utopian- analysis of the consequences of the 'close world' paradigm are crucial.
- [20.00.04] Adriano Autino: but i guess we can prepare a quite biting Press Release, as output of the congress...
- [20.00.44] Adriano Autino: @Stephanie, we will take profit from your excellent academic work, for sure!
- [20.00.47] Sergio Lebid: Stephanie, Excellent assessment!
- [20.01.20] Adriano Autino: I invite everyone to read the Stephanie's papers that are on pour philosophical fragments page...
- [20.01.42] CommanderCatalina: is there a link?
- [20.01.43] Adriano Autino: they are a mine of excellent concepts..
- [20.01.50] Adriano Autino: sure Maria...
- [20.02.11] Adriano Autino: http://www.spacerenaissance.org/PHILOSOPHY/fragments.html
- [20.02.25] Adriano Autino: in that page all our reference papers...
- [20.02.44] Adriano Autino: maybe you should give me something too :)
- [20.02.58] Stephanie Lynne Thorburn: 'The Astrosociological Imagination and the Space Renaissance Initiative- A Discourse Analytical Perspective' is in the SRI library for 2010 and is the literature review from a longer work of mine on the SRI.
- [20.03.22] Kim Peart: Frome the Chair would you like to extend the Congress closing time?
- [20.04.08] Adriano Autino: no Kim, i move to vote tomorrow on the final resolution, as first point
- [20.04.45] Kim Peart: Are you suggesting we finish today now?
- [20.05.19] wheatsheaf1: we'll need discussion before voting tomorrow....
- [20.05.24] Adriano Autino: yes, we can manage the projects tomorrow, together with the committees, balance, etc...
- [20.05.53] Adriano Autino: ok, is there a motion to hold discussion now? I am available
- [20.06.15] wheatsheaf1: easier for me tomorrow
- [20.06.18] Adriano Autino: but i was thinking about Kim, in his white night...
- [20.06.27] Kim Peart: In that case today's SRI Congress and wind up and informal discussion continue
- [20.06.29] Adriano Autino: and you too Rob!
- [20.07.28] Adriano Autino: I am sorry that i took toomuch time, but the matter was big
- [20.07.33] Neda Ansari: I think SRI has perfected the art of online international meetings. Wouldn't you agree we're the first?
- [20.08.01] Kim Peart: Adriano would you like a new chairperson tomorrow? I can continue don't mind either way
- [20.08.20] Adriano Autino: Kim, you made an excellent work
- [20.08.23] Adriano Autino: indeed
- [20.08.53] Adriano Autino: you or Gail will be great!
- [20.08.53] Sergio Lebid: Thank you Mr. Chairman! Great job
- [20.09.02] Kim Peart: Can be cleared quickly tomorrow then
- [20.09.47] Kim Peart: Thanks Sergio



[20.10.29] Adriano Autino: @Neda, we do what we can, maybe we will afford to pay the monthly rate for a professional teleconference tool...

[20.11.09] Adriano Autino: but i like that we have the full transcript for free

[20.11.58] Neda Ansari: Well I think a protocol can be written to teach others.

[20.13.28] Stephanie Lynne Thorburn: @Adriano. Yes, this way we have created an effective log of all contributions.

Indeed Neda, this method of conferencing also has implications and utility as a tool for learning too.

[20.13.41] CommanderCatalina: here is a free platform for up to 200 attendees

[20.13.43 | Edited 20.14.47] CommanderCatalina: http://www.anymeeting.com/

[20.14.25] wheatsheaf1: good day, good evening and good night all. I look forward to tomorrow's discussion. great job everyone. 8-)

[20.14.41] Adriano Autino: ok, let's close

[20.14.52] Adriano Autino: thanks everybody for participating!

[20.15.08] Adriano Autino: see you tomorrow (wave) Ad Astra!

[20.15.11] Sergio Lebid: Good night Rob and great input!

[20.15.13] Kim Peart: Farewell Rob - catch ya later

[20.15.17] C.A. Chicoine: Cheers. :)

[20.15.19] CommanderCatalina: (y)

[20.15.23] Anton Volkonskiy: good night

[20.15.24] Neda Ansari: Bye all.

[20.15.38] Sergio Lebid: Bye for now Friends!

[20.15.41] Kim Peart: Farewell Neda

[20.15.55] Kim Peart: So long Sergio

[20.16.07] Adriano Autino: C.A. please give me your email

[20.16.25] Sergio Lebid: Thank you Kim!

[20.17.07] Kim Peart: With enough good-will, we will achieve escape velocity!!!!!

[20.17.54] CommanderCatalina: bye Kim

[20.18.07] Kim Peart: Farewell Maria

[20.18.24] Kim Peart: Hope to catch you in Australia

[20.18.40] CommanderCatalina: Same Here, I will advise you

[20.18.52] Kim Peart: Excellent

[20.18.54] Commander Catalina: @Rob also

[20.19.01] wheatsheaf1: ye, ditto

[20.19.20] Stephanie Lynne Thorburn: Goodbye all and good work Adriano.

[20.19.21] Kim Peart: Yes - an SRI mini-convention

[20.19.40] Kim Peart: Farewell Stephanie

[20.19.47] wheatsheaf1: outback-SRI sounds catchy!!

[20.20.24] Kim Peart: Yes - at Woomera?

[20.20.43] wheatsheaf1: LOL

[20.20.50] Dinesh Kumar: ready

Jesús Raygoza Krahazik Dragon

Stephanie Lynne Thorburn

Sergio Lebid

Kim Peart