

Closing Remarks

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Many Questions

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- ✦ What needs to be done before the decision?
- ✦ Is MEXT wasting time?
- ✦ Will Japan ever decide?
- ✦ HEP has lost recognition after all.

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- Issues to be clarified for a decision to host the ILC in Japan:
 - A more precise research strategy for the ILC in view of the LHC upgrade path
 - Funding framework that does not affect the broader field of science or other critical national priorities
 - Detailed plan of international cost-sharing
 - whole profile of project cost for construction, operation, upgrades and decommissioning
 - A domestic organization to implement the project consisting of KEK and universities
 - Human resources required during construction and operation, in particular, for leadership positions

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Technology



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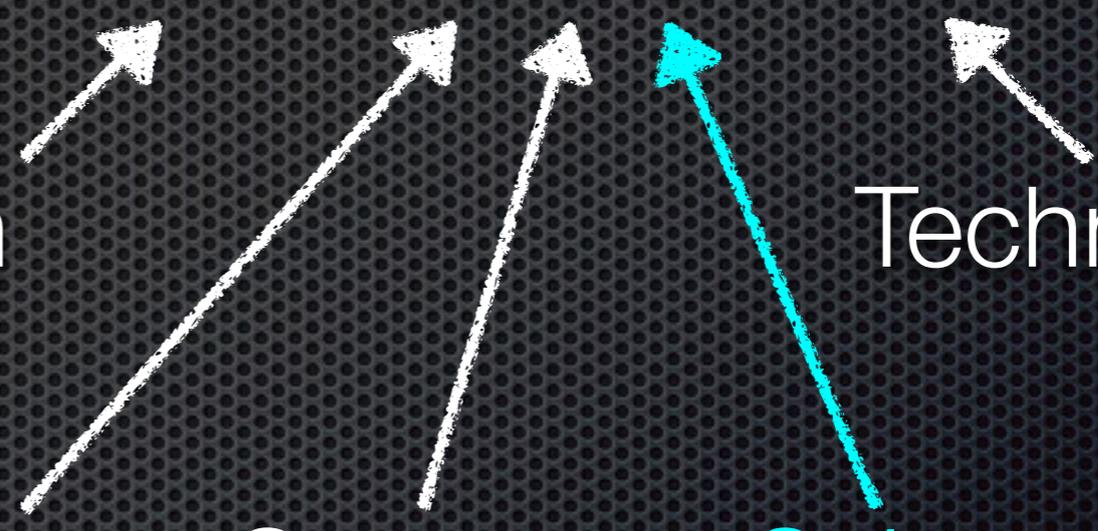
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Culture

Sport

Science



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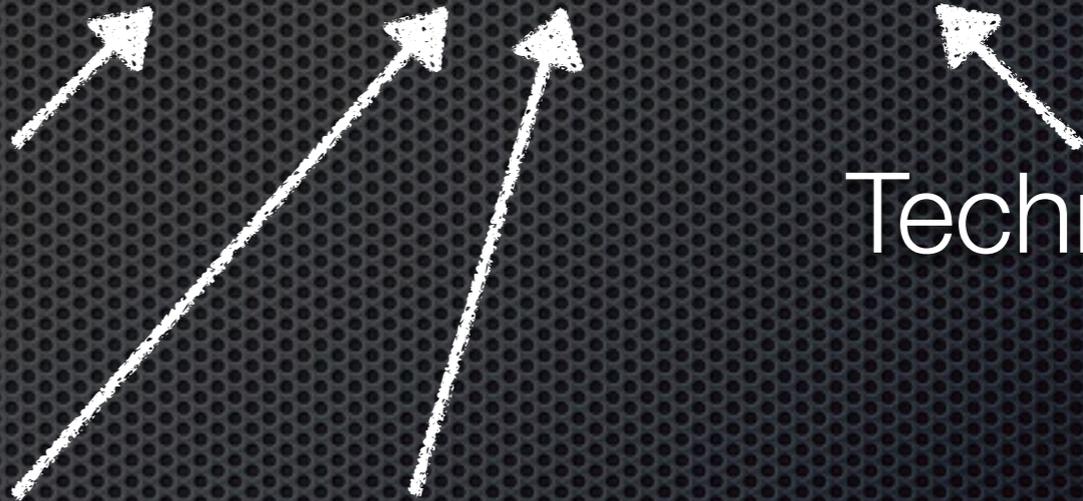
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- Issues to be clarified for a decision to host the ILC in Japan:
 - A more precise research strategy for the ILC in view of the LHC upgrade path → Physics WG
 - Funding framework that does not affect the broader field of science or other critical national priorities
 - Detailed plan of international cost-sharing
 - whole profile of project cost for construction, operation, upgrades and decommissioning → TDR WG
 - A domestic organization to implement the project consisting of KEK and universities
 - Human resources required during construction and operation, in particular, for leadership positions → new WG

- ✦ H. Aihara at yesterday's round table:
“Scientific significance of the ILC was well recognized by the SCJ Committee”
- ✦ SCJ's Report states:
 - ✦ “ILC is endowed with scientific value” (Higgs & Top)
 - ✦ “more compelling and articulate argument to justify the ILC to search for unknown particles and physics beyond the Standard Model, running concurrently with the upgraded LHC”

➡ Physics WG

ICFA STATEMENT ON THE PROGRESS TOWARDS AN INTERNATIONAL LINEAR COLLIDER (ILC) IN JAPAN

The International Committee for Future Accelerators (ICFA) is pleased to note the great progress of the global community's efforts to realize a linear collider built in Japan. ICFA, which includes the Directors of the world's major accelerator laboratories, will evaluate the technical capabilities worldwide to build the ILC.

20 February 2014

ICFA/LCB has started working on
the "human resource" issue

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- ✓ A more precise research strategy for the ILC in view of the LHC upgrade path
- ✦ Funding framework that does not affect the broader field of science or other critical national priorities
- ✦ Detailed plan of international cost-sharing → US-Japan high-level talk (no commit)
- ✓ whole profile of project cost for construction, operation, upgrades and decommissioning
- ✦ A domestic organization to implement the project consisting of KEK and universities
- ▲ Human resources required during construction and operation, in particular, for leadership positions → MEXT new WG / ICFA

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✦ Issues to be clarified for a decision to host the ILC in Japan:

- ✓ A more precise research strategy for the ILC in view of the LHC upgrade path
- ✦ Funding framework that does not affect the broader field of science or other critical national priorities → ~ beyond MEXT
- ▲ Detailed plan of international cost-sharing → US-J gov
- ✓ whole profile of project cost for construction, operation, upgrades and decommissioning
- ✦ A domestic organization to implement the project consisting of KEK and universities → ILC Planning Office
- ▲ Human resources required during construction and operation, in particular, for leadership positions → MEXT new WG / ICFA

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- ✦ “Other countries/regions cannot start anything and all the efforts will decay unless Japan makes the decision.”

My personal observations (1)

- ✦ According to my observations (J-Parc, LHC, etc), Japanese government tends to make a decision at a sudden, unexpected timing.
- ✦ The project must be ready when the time comes.
 - ✦ MEXT has been working hard to get it ready as much as possible.

My personal observations (2)

- ✦ Japanese government wants to make sure what reactions other countries will take after it makes the decision.
 - ✦ ILC must be GLOBAL !
 - ✦ Not just for resources but more for fascination “the First Large International Project in Asia”
 - ✦ Remember why neither German TESLA nor US leadership did not succeed in the past
- ✦ They thus want to build and keep a close, reliable contact with other countries at high levels.
 - ✦ Encouraging efforts going on between US-Japan at governmental and legislative levels

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What recognition HEP used to have?

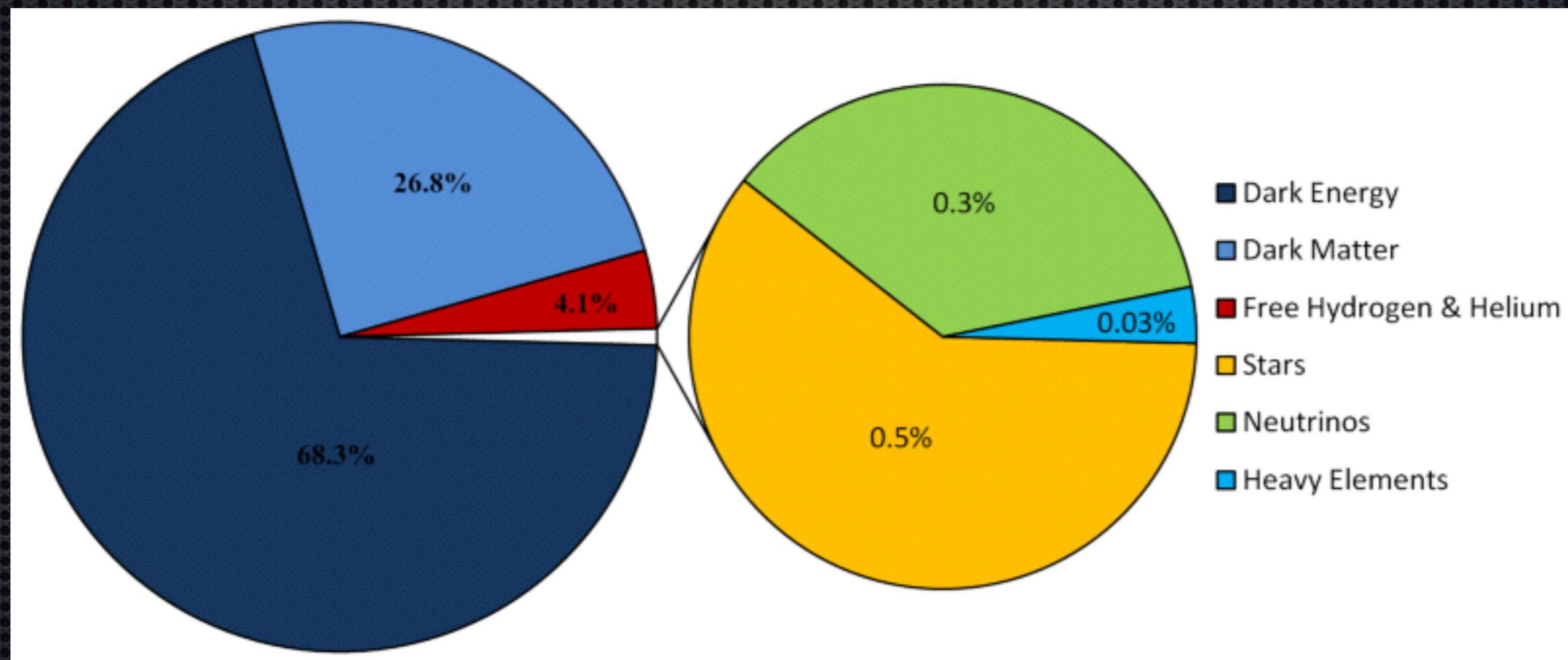
- ✦ Just 80 years ago we didn't know what makes up the energy of the Sun
- ✦ Subatomic physics uncovered the secret and brought it to the earth (bombs and nuclear power)
- ✦ recognition for fear or respect?

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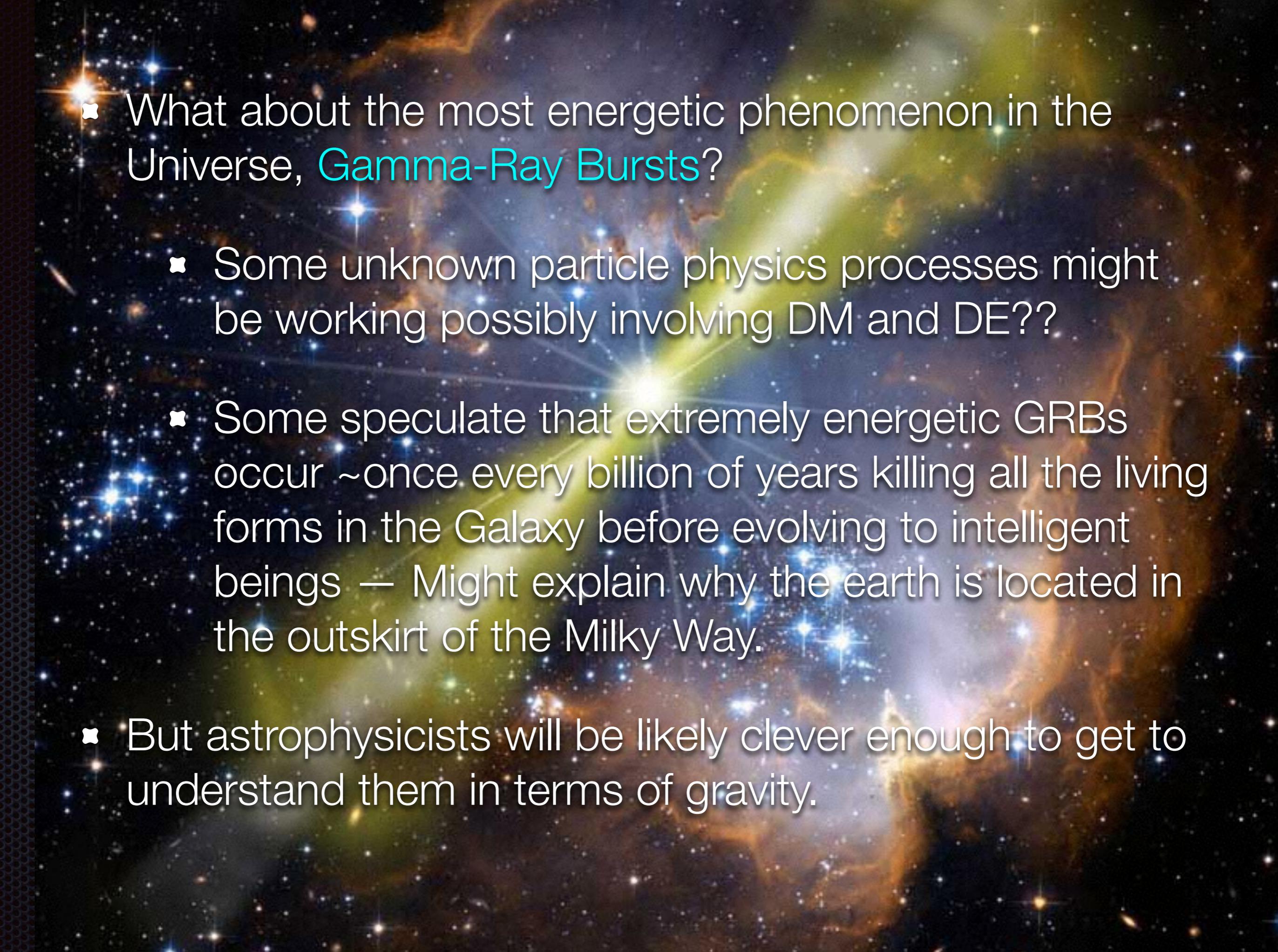
Sounds familiar?

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- ✦ We still don't know what makes up the energy of the Universe
 - ✦ Dark Matter and Dark Energy
 - ✦ Can we bring it to the earth for any use?



but seems difficult to convert to active energy

- 
- ✦ What about the most energetic phenomenon in the Universe, **Gamma-Ray Bursts**?
 - ✦ Some unknown particle physics processes might be working possibly involving DM and DE??
 - ✦ Some speculate that extremely energetic GRBs occur ~once every billion of years killing all the living forms in the Galaxy before evolving to intelligent beings — Might explain why the earth is located in the outskirts of the Milky Way.
 - ✦ But astrophysicists will be likely clever enough to get to understand them in terms of gravity.

- ✦ So much for hoax science...
- ✦ We may still have some recognition for our science
- ✦ Recall last evening's event where many Diet members gathered just for the ILC.
 - ✦ Diet members will visit Washington next week (again)



federation of diet members meeting yesterday

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- ? Funding framework that does not affect the broader field of science or other critical national priorities
- ▲ Detailed plan of international cost-sharing → **Diet members visit Washington next week**
- ✓ whole profile of project cost for construction, operation, upgrades and decommissioning
- ▲ A domestic organization to implement the project consisting of KEK and universities → KEK ILC Planning Office
- ▲ Human resources required during construction and operation, in particular, for leadership positions → MEXT new WG

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- ▲ Detailed plan of international cooperation → US-J gov't/legislative
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Present Situation

Industry also helping us a lot

- ✦ At one of the Federation meetings, a senior management in industry gave a lecture on importance of accelerators for industry, in particular indispensable for developments of new materials for airplanes etc.
- ✦ Somebody asked “How will the ILC be useful for industry?”
- ✦ He then gave an immediate reply, “All the accelerator technologies we now benefit from for competence in industry are thanks to the TRISTAN Project in 80’s-90’s. If the ILC is realized in Japan, we will benefit greatly from transformative accelerator technologies 20 years later.”

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Sincere thanks to Advanced Accelerator Association (AAA) for the excellent Tokyo Event!

Finally

- ✦ Commemorate the birth of “Linear Accelerator Civilization” as new KEK DG stated yesterday.
- ✦ Acknowledgements are for:
 - ✦ Local Organizers & young helpers for the Workshop
 - ✦ AAA & LCC for the Tokyo Event
- ✦ Next: LCWS2015, Whistler, Canada, Nov 2-6
- ✦ New KEK DG said yesterday:
After 90 years of “Circular Accelerator Civilization,” it is our responsibility to start a new “Linear Accelerator Civilization,” which may last for the next 100 years.