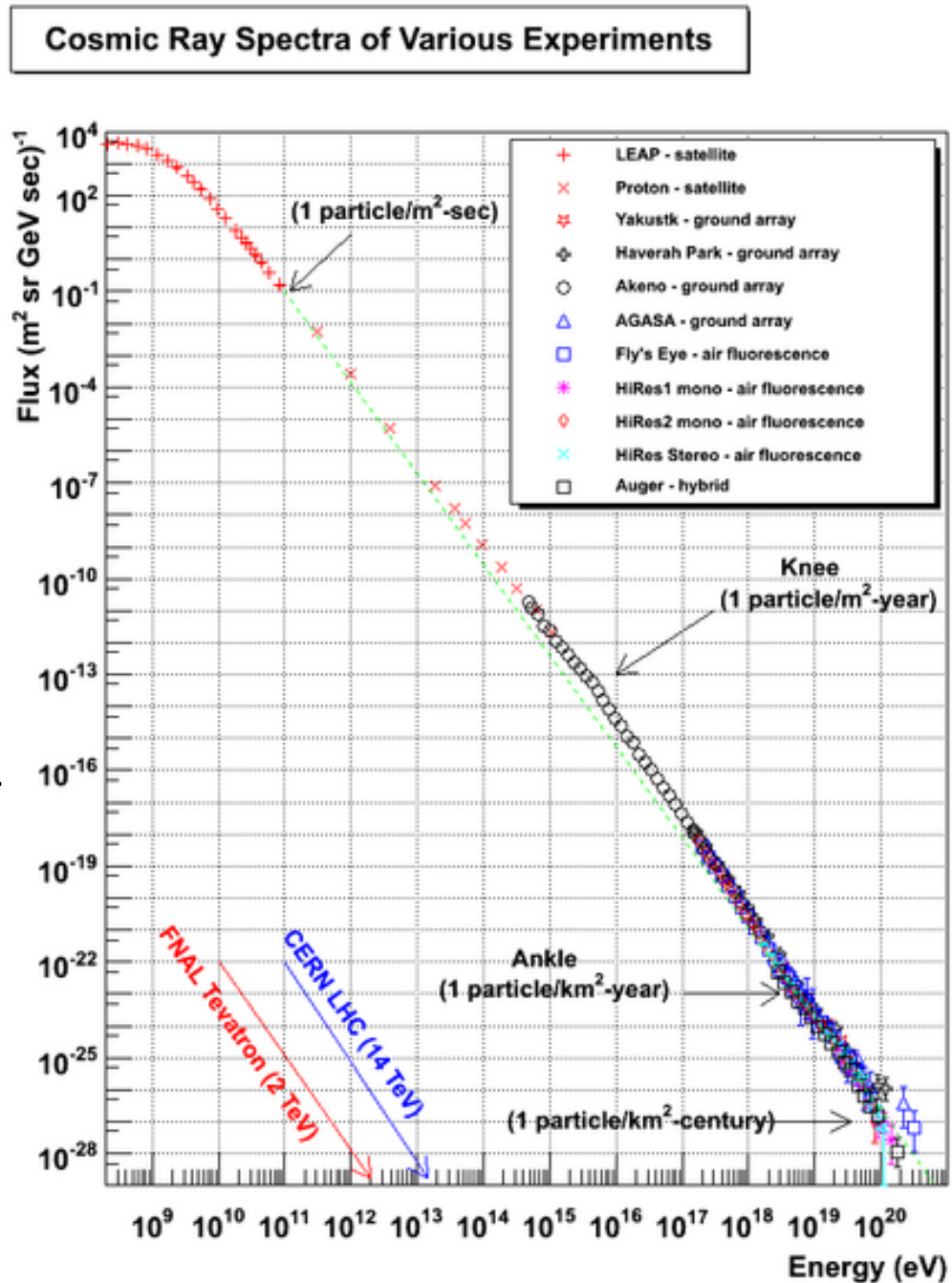


Auger –Update from Nieuwegein

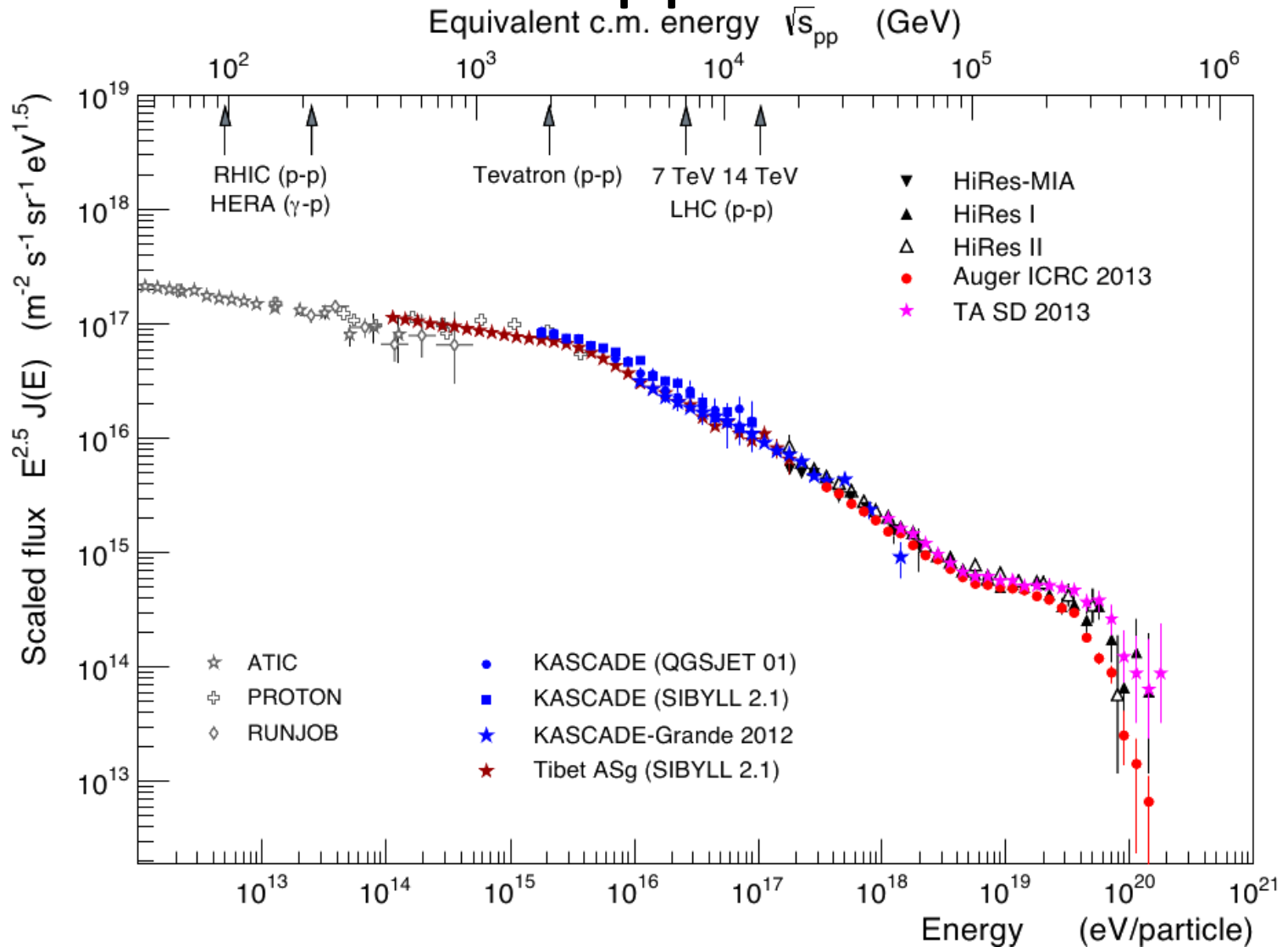
Staff-meeting 16-3-2017

A reminder: The Cosmic Ray Energy Spectrum

32 orders of magnitude in flux measured for 'only' 11 orders of magnitude in energy



Flux is usually shown multiplied by $E^{2.5}$ to make it appear 'flat'



Highlights from Nieuwegein

Main issue: Can we perform our research at CTA/LOFAR/.... ???

Two answers:

- **Exposure** (== Luminosity): Can you do the same physics with 1/30 of the exposure?
 - Sure if you wait 30 times as long
 - Equivalent: What is the physics of LHC when only getting 3% of the data?
- **Energy**: Can you do the same physics with about 1/1000 of the energy?
 - No
 - Equivalent: Could we not have done LHC physics at the PS
- **For Cosmic Rays at the high energy frontier: big is a necessity**

Progress in Argentina: The AugerPrime engineering array

