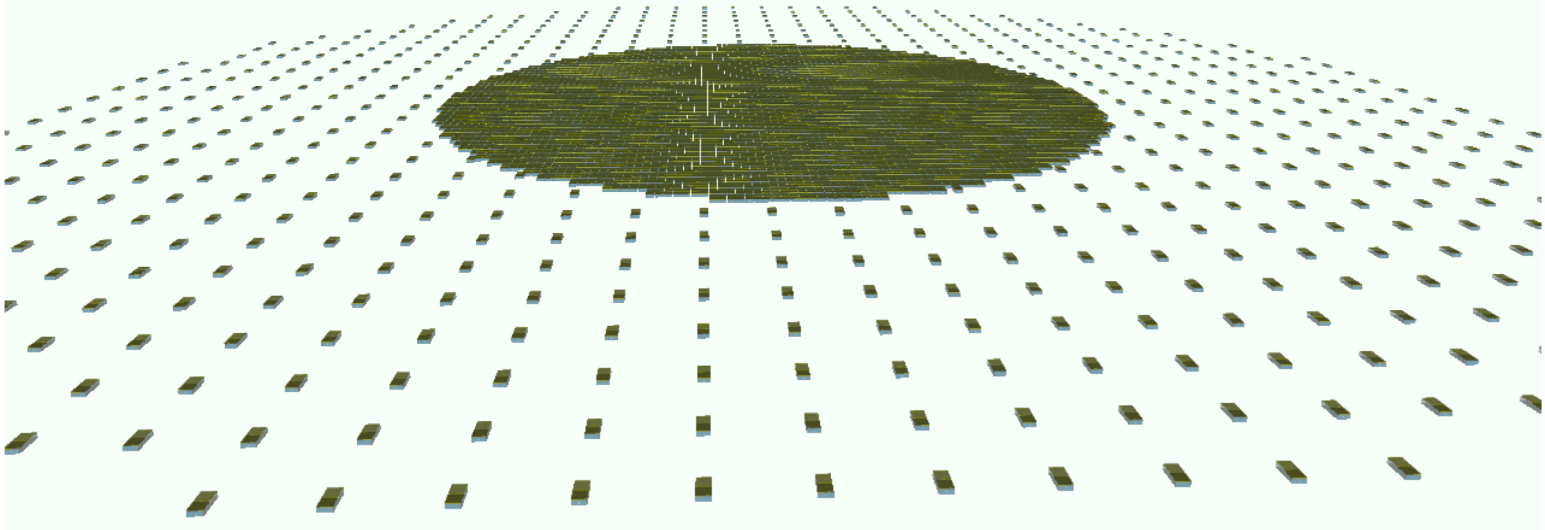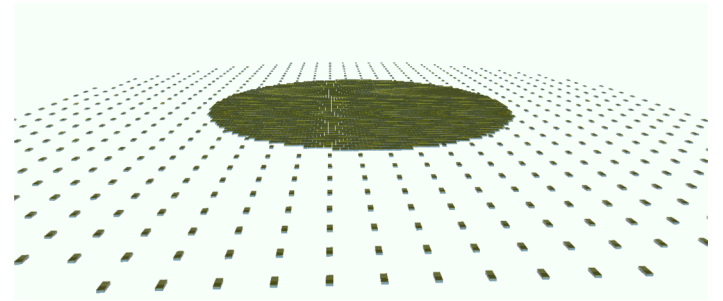# LATTES sparse array

Baseline dimensions :

- Core array 20000 m^2
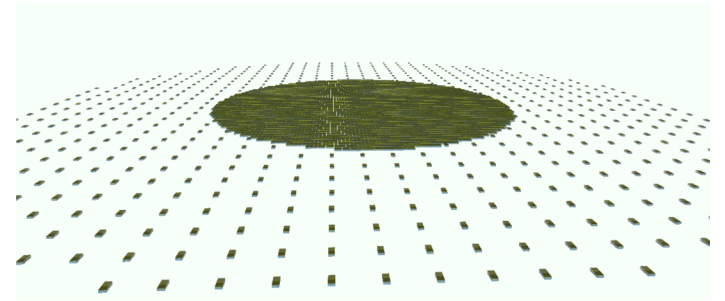- Total area 100000 m^2

- Extend LATTES sensitivity to higher energies (~ 100 TeV);
- Improve sensitivity at low energies (veto hadron showers outside the core array);

LATTES sparse array

- **Several parameters to be studied/optimised :**

  - Sparse density

    - Constant ? Graded ?

    - High-energy performance vs shower vetoing

  - RPCs needed in the sparse stations ? Maybe not...

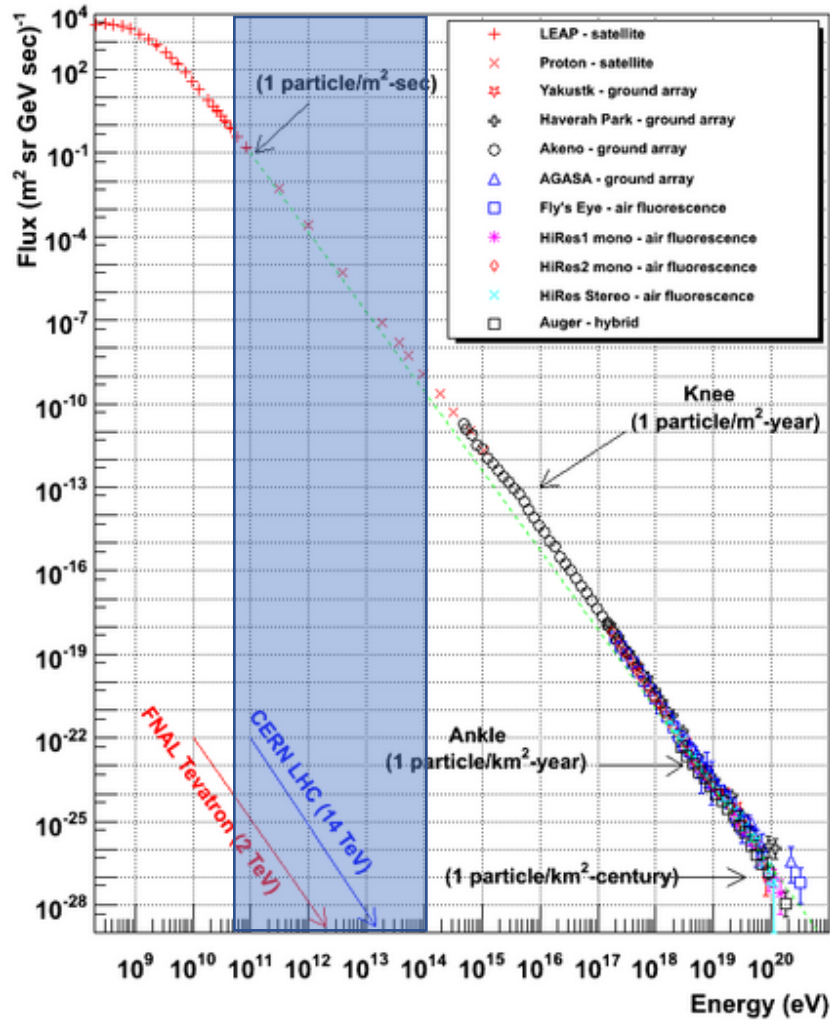# LATTES sparse array

- **Several parameters to be studied/optimised :**

    - Sparse density

        - Constant ? Graded ?

        - High-energy performance vs shower vetoing

    - RPCs needed in the sparse stations ? Maybe not...

- Sparse array already setup in LATTES simulation.
- Present strategy is to simulate the sparse area with the same density as the core array; remove stations afterwards.

Cosmic Ray Spectra of Various Experiments

Acknowledgements