



Contribution ID: 36

Type: **not specified**

## Are Supernova Remnants as Cosmic Ray Factories? Yes, but...

*Wednesday, 16 October 2024 16:00 (45 minutes)*

First-principles plasma simulations have been pivotal in helping developing a theory of ion and electron acceleration at shocks, and in particular in SNRs. I discuss what we have learned about particle acceleration efficiency, spectra, and maximum energy, and contrast these results with multi-wavelength emission from SNRs. Despite compelling evidence of hadron acceleration in these sources, there are both theoretical and observational open questions that prevent us from claiming that SNRs can accelerate CRs up to the knee.

**Primary author:** CAPRIOLI, Damiano (University of Chicago)

**Presenter:** CAPRIOLI, Damiano (University of Chicago)

**Session Classification:** Presentations