

Session Program

4-6 Feb 2026

Modelling Astrophysical Plasmas with iPIC3D: First Conference on Implicit PIC Simulations and Beyond

iPIC3D Session 6: Chair - Pranab J Deka

Huis Bethlehem, Aula Wolfspoord (00.08)
Schapenstraat 34, Leuven 3000

Thursday 5 February

13:45

iPIC3D Session 6: Chair - Pranab J Deka

Session | **Location:** Huis Bethlehem, Aula Wolfspoort (00.08), Schapenstraat 34, Leuven 3000 | **Conveners:** Hongtao Liu, Immanuel Christopher Jebaraj, Jesse Vos, Jens Mahlmann, Maximilien Péters de Bonhome

13:45-14:10

Next-Generation Realism in Extreme Astrophysical Plasma Simulations with Entity (online)

Speaker

Jens Mahlmann

14:10-14:35

Zeltron: From Solar-Wind Expansion to Extreme Astrophysical Plasmas

Speakers

Jesse Vos, Maximilien Péters de Bonhome

14:35-15:00

Energy Conserving Semi-Lagrangian Scheme for plasma simulations

Speaker

Hongtao Liu

15:00-15:25

Balancing self-consistency and practical realism - Can we truly understand cross-scale energy transfer at shocks?

Speaker

Immanuel Jebaraj

15:25