

Report on the Special Session
Multiscale Analysis:
Geometry and Evolution Problems (mSPACE)
at the 15th AIMS conference
by Delio Mugnolo

The special session, “Multiscale Analysis: Geometry and Evolution Problems (mSPACE),” held during the 15th AIMS Conference in Athens (July 6–10, 2026), proved to be a resounding success.

Organized by Léonard Monsaingeon (WG3 Leader), Delio Mugnolo (Action Chair), and Matthias Neumann (WG4 Leader), the session spanned three days (July 8–10) and featured 25 speakers. It stood out as one of the largest special sessions within the broader conference, which attracted over 2,500 participants.

Our session was arguably the most topically diverse, with invited talks spanning all four working groups of the Action. Presentations covered a broad spectrum of research, ranging from the convergence of gradient flows and inverse problems on fractals to the spectral geometry of graphs and the multiscale analysis of ecological systems.

Beyond its mathematical breadth, the session achieved a remarkable level of international representation, with participants joining us from four continents. We also maintained an excellent balance regarding gender and academic seniority. Despite the tight schedule necessitated by the scale of the conference—with each talk allocated 30 minutes—the discussions remained consistently lively and engaging. Furthermore, this gathering served as a valuable opportunity to present our Action to a wider audience and also to deepen our collaboration with the COST Action 24136 (InterCoML), whose WG2 leader participated as one of our speakers.

Overall, several applications for WG memberships have been submitted as a direct consequence of this Special Session.