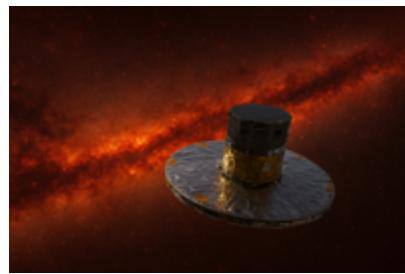


## The Gaia NIR mission and the engagement of the Spanish Community



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### Advancing XMC kinematics with GaiaNIR

*Thursday 29 January 2026 10:30 (20 minutes)*

GaiaNIR will dramatically advance studies of the Clouds (LMC and SMC) by delivering two key improvements in astrometric precision and coverage. First, its extended time baseline will sharpen proper motions for the 15–20 million LMC and SMC stars already observed by Gaia. Second, its near-infrared sensitivity will enable the detection of large new stellar samples in heavily dust-obscured inner regions, such as the LMC bar. Together, these capabilities will uncover previously inaccessible internal kinematic structures and refine dynamical models built on the foundation of Gaia.

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