The Milky Way Revealed by Gaia: The Next Frontier



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Angular momentum of the Classical Cepheids and the spiral structure of the Milky Way

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The classical Cepheids are variable stars with relatively young ages (<300 Myr). Their tight period-luminosity relation provides highly accurate distance estimates. By combining recent measurements of proper motions from Gaia EDR3, radial velocities from Gaia DR3, and Cepheid distances, it is possible to study the details of the phase space distribution of this population. In my talk, I will discuss how the recently discovered gap in the angular momentum of Cepheids can be attributed to the spatial separation of adjacent spiral arms in the Milky Way.

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Presenter: SEMCZUK, Marcin (Institut de Ciències del Cosmos - Universitat de Barcelona)Session Classification: WG1: The Milky Way as a Galaxy (III). Chair: Sonia Anton