



Royal
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Dr Paola Pinilla – Price Medal (G)

Dr Paola Pinilla is an internationally recognised leader in the field of protoplanetary disk studies. She has made significant advances towards understanding the first steps of planet formation, specifically concerning growth from dust particles in the interstellar medium to planetesimals in protoplanetary disks. Her work has been highly influential in understanding the growth and dynamics of dust particles in different disk environments, and the evolution of exoplanetary systems.

Dr Pinilla's expertise bridges between theoretical and numerical models, and major observational campaigns from the world's foremost telescopes, including ALMA, VLT, and JWST. The combination of observational and theoretical approaches enables her to make the link between protoplanetary disk observations and dust physics. Dr Pinilla has made predictions that have since been supported by disk observations, and she has interpreted spectral and spatial observations of a range of disk structures. One of Dr Pinilla's most important contributions is the prediction of "dust traps" that prevent millimetre-sized dust particles from falling towards the central star. Because these traps allow planetary embryos to form, their prediction has overcome what were previously considered as barriers to theoretical planet formation.

Dr Pinilla leads a successful research group and mentors Masters and PhD students as well as post-doctoral fellows. She represents the UK in several panels. Her fundamental contributions to protoplanetary disk studies make her a worthy recipient of the Price Medal.