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# ALMA observations of the debris disk around Beta Pictoris

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## Résumé

Beta Pictoris is an iconic star for anyone studying extrasolar planetary systems and their formation. Aged about 10-20 million years, it has a debris disk seen edge-on, which was the first dust disk to be imaged in scattered light in the early 1980s. The infall of comets onto the star and the observation of structures in the dust disk have long served as indirect evidences for the presence of at least one giant planet in this system, until it was discovered by direct imaging in 2009. Obviously, the Beta Pictoris disk was a target for ALMA. In this presentation, I present ALMA images of the dust disk. CO is also detected and I show that a significant mass of CO is orbiting the star in a belt at radii 60-130AU, coincident with the dust belt. These data show asymmetries that support the presence of a second extrasolar planet in the system.

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