

## Gas in Debris Disks: A New Way to Produce Dust Patterns?

Marc J. Kuchner

NASA Goddard Space Flight Center

Debris disks like those around Fomalhaut and Beta Pictoris show striking dust patterns often attributed to planets. But adding a bit of gas to our models of these disks--too little to detect--could alter this interpretation. Small amounts of gas lead to new dynamical instabilities that may mimic the narrow eccentric rings and other structures planets would create in a gas-free disk. I'll discuss these phenomena and whether or not we can still use dust patterns as indicators of hidden exoplanets.