Using SOFIA and Spitzer to Probe the Size Distribution of PAHs

C. Knight¹, E. Peeters¹,², A.G.G.M. Tielens³, O. Berné⁴,⁵, D.J. Stock¹

(1) University of Western Ontario, (2) SETI Institute, (3) Leiden Observatory, (4) Université de Toulouse, (5) CNRS, IRAP

Board #108

- We use MIR observations to probe the polycyclic aromatic hydrocarbon (PAH) size distribution and ionization balance in two prominent reflection nebulae.

NGC 2023

- PAH Size
  - 11.2/3.3 um

NGC 7023

- Ionization
  - 8/11.2 um

- Find the average PAH size and ionization increases towards the illuminating source.

- Implies a photochemical evolution of these species within these regions.