Getting the Most Out of Your ALMA DATA with ADMIT: The ALMA Data Mining Toolkit

Leslie Looney*[1], Lee Mundy[2], Doug Friedel[1], Peter Teuben[2], Marc Pound[2], Lisa Xu[1], Kevin Rauch[2], Robert Harris[1], and Jeff Kern[3]

[1] University of Illinois, Urbana, IL
[2] University of Maryland, College Park, MD
[3] NRAO, Socorro, NM

ADMIT (ALMA Data Mining Toolkit) is a pipeline tool for the creation and analysis of new science products from ALMA data. ADMIT quickly provides users with a detailed overview of their science products, for example: line identifications, line 'cutout' cubes, moment maps, and emission type analysis (e.g., feature detection). Users can download the small ADMIT pipeline product (< 20MB), analyze the results, then fine-tune and re-run the ADMIT pipeline (or any part thereof) on their own machines and interactively inspect the results. ADMIT has both a GUI and command line interface available for this purpose. By analyzing multiple data cubes simultaneously, data mining between many astronomical sources and line transitions are be possible. Users are also be able to enhance the capabilities of ADMIT by creating customized ADMIT tasks satisfying any special processing needs. We will present some of the salient features of ADMIT and example use cases.