

WP3 Progress Meeting, Grenoble, 6-7 January 2009

Draft summary of the discussion on observational projects
(V1.0; 12.01.09; please send comments/updates to jbouvier@obs.ujf-grenoble.fr)

Goals :

Identify robust samples of VLMOs in various SFRs
Fully characterize (sub)stellar properties of VLMO samples: mass, class, accretion, etc.
Keep looking for disks around VLMOs at various stages of evolution
M dwarf and BD binary/multiplicity statistics and properties around 5 AU
Spatial distribution: MST, Q factor
Kinematics, velocity dispersion as a function of mass
BD/star ratio
Properties of pre-BD cores: initial conditions

Plans :

WP3 Working Groups (WGs) have been set up to reach these goals, each with one coordinator. The role of the WG coordinator is to gather and spread information (what data is available ? what should we obtain, what instruments can be used ? etc.), *update information on on-going observational programs on the secured WP3 Wiki internal page*, organize discussions and *teleconferences* on observing plans whenever needed, get teams prepared for observing time request dead-lines, i.e. coordinate the observational effort within the working group in relation with WP3 coordinators (Simon Goodwin, Jerome Bouvier, France Allard). Every coordinator is welcome to develop a specific Wiki page to describe the WP3 WG activities.

Step 1. Imaging surveys + follow up spectroscopy : identify robust samples of VLMOs

SFR Priorities defined at the WP3 kick-off meeting: Rho Oph, Serpens

WG0A. Rho Oph (coord. Catarina, Grenoble): WIRCAM, Spitzer, UKIDSS, XMM

WG0B. Serpens (coord. Elaine, Exeter): WIRCAM, UKIDSS, Spitzer, Chandra

(N.B. Dedicated WP3 Wiki pages will be set up by the coordinators for these 2 SFRs)

Step 2. Follow up observations: derive properties of VLMOs

WG 1. Pre-stellar cores (coord. Philippe André, Saclay)

Herschel : core mass distribution and temperatures down to 0.02 Mo
Follow up observations for kinematics mm line observations (IRAM 30m): turbulence, core-core interaction, angular momentum

WG 2. Kinematics (coord. Simon Hodgkin, Cambridge)

Proper motion
Hawk-I, UKIDSS

Radial velocities

WG 3. Disks (coord. Jean-Louis Monin, Grenoble)

Spizer yes/no disk

Mm obs. needed for mass and size

Serpens SMA survey Class I/II (Elaine)

IRAM, Artemis, CSO, JCMT

Large Program at IRAM ?

WG 4. Multiplicity (coord. Hervé Bouy, IAC)

VISIR/NACO Serpens 7 objects

Hectospec, Spex, Xshoter, Sinfoni

Large program at ESO ?

Lunar occultation ?

WG 5. X-ray (coord. Guisi Micela, Palermo ; Elaine Winston, Exeter)

Chandra proposal (Elaine)

Droxo project (Guisi)

Any new X-ray observations to be done on WIRCAM areas ?

Large Program on Chandra and/or XMM ?

Deep-thermal IR (?)

Spizer warm mission ?