



02 October 2020

To the  
programme selection board

**Subject:** Invitation for research-visit of Mr. Héctor Jair Morales Gómez

To whom it may concern,

We confirm to invite Mr. Héctor Jair Morales Gómez to work in the time of Feb 15th to May 15th 2021, on his thesis project, within the working group of Dr. Jörg-Uwe Pott at MPIA, GC dept.

The project title is "Interferometric Imaging and spectro-interferometry of young stellar objects".

Herewith, we confirm to support Mr. Morales funding application for the respective visit. MPIA will provide access to our facilities at the typical level required for a bachelor thesis. The thesis project uses data obtained with GRAVITY, the near-infrared interferometer at the VLTI. The objective is to study the morphology of the inner regions in young stellar objects using spectro-interferometry. With this project the student will learn the basic principles of the technique. The analysis of the data includes geometrical model fitting of the interferometric observables for their astrophysical interpretation. Additionally, the student will use his models to reconstruct images based on the novel technique of "Compressed Sensing". Validate the reconstruction code and the construction of the Compressed Sensing data basis will be the main duty during the research stay at the MPIA.

Please let me know in case of any questions regarding this visit.

Sincerely

Dr. Jörg-Uwe Pott

