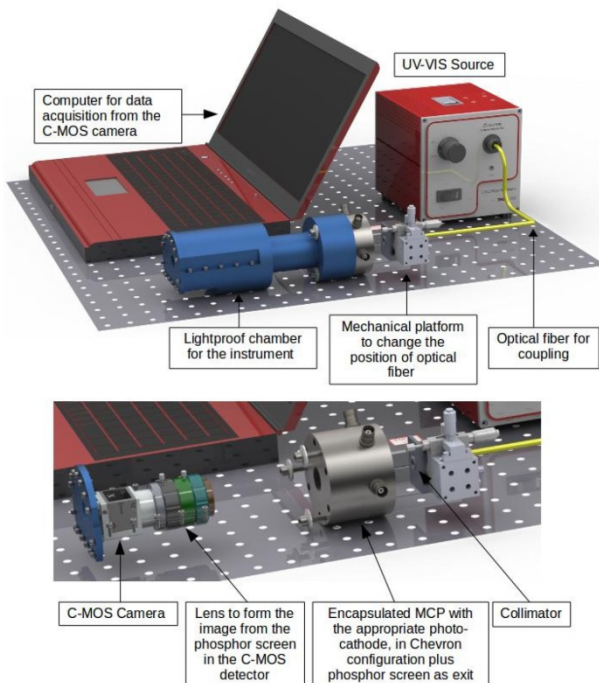


Financing from the Mexican Space Agency



- Development of a computational model of Microchannel plates based on the physics involved.
- Generation of the visible photon shower in the output of the MCP
- Evaluation of new algorithms for centroiding calculation of the photon shower



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INSTITUTO TECNOLÓGICO DE TIJUANA
DEPARTAMENTO DE INGENIERÍA ELÉCTRICA Y ELECTRÓNICA

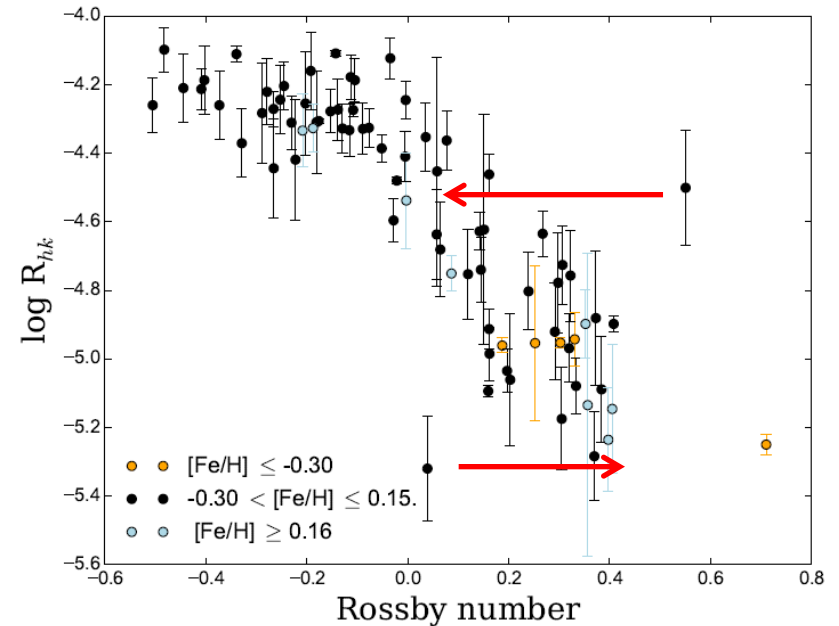


MODELADO DE PLACAS MICRO-CANAL COMO
DETECTORES ASTRONÓMICOS DE RADIACIÓN UV

TRABAJO DE TESIS PRESENTADO POR:
ANGEL MANRIQUE POZOS FLORES

Science with the WSO-UV

- Properties of exo-planetary atmospheres and the impact of UV stellar radiation in their chemistry
- Space UV features as clocks in solar-like stars
- Sinergies with large ground based infrastructures (The Large Millimeter Telescope)



Proceedings of the International Astronautical Congress, IAC

2016

67th International Astronautical Congress, IAC 2016; Guadalajara; Mexico; 26 September 2016 through 30 September 2016; Code 126413

UV astronomy from space: On the ages of exo-worlds (Conference Paper)

Dagostino, M.C.^a ✉, Bartone, E.^a ✉, Aguilar, J.M.O.^a ✉, Aguilar, N.D.O.^a ✉, Montez, C.^a ✉, De Castro, A.I.G.^b ✉, Sachkov, M.^c ✉, Serna, B.O.^d ✉, Castillo, E.^a ✉, Flores, A.P.^e ✉, Trujillo, L.^e ✉

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2016 13th International Conference on Electrical Engineering, Computing Science and Automatic Control, CCE 2016

21 November 2016, Article number 7751230

13th International Conference on Electrical Engineering, Computing Science and Automatic Control, CCE 2016; Mexico City; Mexico; 26 September 2016 through 30 September 2016

Category number CFP16827-USB; Code 125070

Modeling micro-channel plates as astronomical detectors of UV radiation (Conference Paper)

Pozos, A.^a ✉, Castillo, E.^b ✉, Chavez, M.^b ✉, Trujillo, L.^a ✉

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Caption of Fig. Rh+k vs Rossby number

Correlation between the Rossby number (=rotational period/convection turnover time) and the photospherically corrected flux in emission of the MgII (h+k) doublet at 2800 angstrom. Fluxes were collected from IUE and HST/STIS at high resolution in a sample of ~100 F, G and K type stars on the main sequence. Such a correlation will be used to establish rotation periods and ages of other stars. Outliers correspond to objects for which we believe the measured rotational periods (through the modulation of H+K CaII lines) are wrong and the right most point corresponds to a very metal poor object.

WSO will be extremely valuable to:

- **Establish a real “mean” emission MgII flux through variability monitoring**
- **Investigate the effect of metallicity on the correlation**
- **Increase the stellar sample in the UV including targets in open clusters where age determinations can be obtained through isochrone fitting.**