Job ID: IWF033TEC024

The Space Research Institute (IWF) of the Austrian Academy of Sciences (OeAW), Austria's leading non-university research and science institution, is offering a position as an

INSTRUMENT OPERATOR (F/M/X)
for the ASPOC instrument onboard NASA MMS
(part-time, 10h per week)

Interested in learning how to operate a scientific instrument currently in space? The IWF is recruiting an "Instrument Operator" to conduct routine operation scheduling for its Active Spacecraft Potential Control (ASPOC) instruments onboard the NASA Magnetospheric Multiscale (MMS) mission. The MMS mission was launched in 2015 and is composed of four identical spacecrafts designed to study Earth's magnetosphere and its plasma environment. The IWF contributed with ASPOC, an ion emitter used to expel positively charged particles, allowing to control the electrical potential of the spacecraft with respect to the surrounding plasma environment. Each spacecraft is equipped with two ASPOC units (eight units in total), and all units have been successfully operating for more than 8 years.

Your profile:

- Student currently enrolled in a Bachelor program or starting a Master program and interested in space instrumentation or aerospace engineering
- Basic knowledge of programming languages such as C++ or Python (ideally IDL)
- Background in software development and/or telecommunication will be valued asset but is not mandatory
- Proficiency in English is required to participate in the weekly meetings

Your tasks:

- Plan the weekly routine operation of ASPOC by preparing the list of telecommands to be sent to spacecraft
- Regularly monitor the ASPOC Science Data Products to ensure that the instruments are operating nominally
- Participate in the weekly MMS meeting (Tuesday 20:00 – 21:00) where you will report ASPOC status and performance to the NASA MMS scientists
- Prepare the monthly performance report of the instruments, which contains statistical data about the emitter usage
- Participate in the half-yearly change of operational phase of the instrument

The position will allow you to get familiar with the Telecommand/Telemetry (TC/TM) standard used to operate instruments onboard most ESA and NASA missions. You will also interact with the international MMS team of engineers and scientists during the regular weekly meetings. Finally, provided interest, you will have the opportunity to dive into the inner working of the ASPOC application software or science data product using ASPOC measurements.

You will be hired by the IWF with a 10 hours/week contract starting from as early as April 01st, 2024, for a fixed duration of 2 years, not renewable. Your commitment to the position shall ideally be for this two-years period. The possibility for remote-work can be discussed after the initial six months depending on the learning progression. We offer an annual gross salary of € 8.962,66 according to the collective agreement of the Austrian Academy of Sciences.

Applications must include a cover letter in addition to (1) curriculum vitae, (2) cover/motivation letter and (3) certificates for full academic record. Please send the application as one PDF file (Job ID: IWF033TEC024) to gabriel.giono@oeaw.ac.at **no later than 31st, March 2024.** Inquiries about the position should be directed to Gabriel Giono.

The Austrian Academy of Sciences (OeAW) pursues a non-discriminatory employment policy and values equal opportunities, as well as diversity. Individuals from underrepresented groups are particularly encouraged to apply.

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