#### OBSERVING TIME PROPOSAL FORM 2024A

# for the 1.5 m solar telescope GREGOR at the Observatorio del Teide, Tenerife, Spain

For observing phase from April - July 2024 Submit the completed form to: kis\_tac@leibniz-kis.de (German time KIS/AIP/MPS) or http://research.iac.es/OOCC/solar-cat/ (Spanish time)

Deadline: 22 January 2024, 12:00 (CET)

For more information consult:

https:

//www.leibniz-kis.de/en/observatories/gregor/observations-with-gregor/  $$\operatorname{and}$$ 

https://www.leibniz-kis.de/en/observatories/gregor/gregor-instruments/

For questions please contact KIS info mail:

kis\_tac@leibniz-kis.de

The applicant is requested to adhere to the following rules:

- 1. The GREGOR steering committee will offer **on-site or remote observations from April until July, all days including weekends**. The PI will be able to conduct observations on-site or remotely with the support of assistants present at the observatory in Tenerife or remotely assisting from Germany.
- 2. The PI is committed to cooperate archiving the raw data, and to make Quick Looks available as soon as possible, typically in less than 1 month after recording the data;
- 3. The PI agrees to follow the rules in the instructions for observers, which include safety precautions to avoid endangering the telescope and the requirement to read manuals before the observations.
- 4. The PI commits her/himself to submit an observing report according to a given template within two weeks after the campaign focusing on the telescope and instrument performance. For efficient use of telescope time, the technical staff needs feedback about the performance of the telescope and instruments.
- 5. The PI agrees that the data are openly available after a proprietary phase of 12 months. For PhD theses, the proprietary phase is prolonged to 2 years.
- 6. The PI is strongly encouraged to share the data with consortium members and with external scientists on a collaborative basis.
- 7. All publications based on GREGOR data have to acknowledge GREGOR according to the template on our website. The GREGOR papers to be cited are Kleint et al. A&A 641, A27 (2020) and the relevant papers from the special AN issue 'Astronomical Notes, Volume 333, 2012, Number 9' including Schmidt et al. 2012, AN 333, p796 (DOI: 10.1002/asna.201211725) and the instrumentation papers.

## 1 Title of Project:

## 2 Applicants

Principal Investigator:
Affiliation:
Email address:
m Co-Investigators(s):
Affiliation(s):
Email address(es):
We/I want to apply for time under the KIS Time. Send to kis_tac@leibniz-kis.de We/I want to apply for time under the German Time (AIP/MPS). Send to tac@leibniz-kis.de We/I want to apply for Spanish time. http://research.iac.es/00CC/solar-cat/
[ ] The PI is a PhD student and the proposal is for data for the thesis.
<ul><li>I require a computer account at OT.</li><li>I already have a computer account at OT.</li></ul>
[ ] I am a first time or inexperienced user. (Please contact kis_tac@leibniz-kis.de in case of questions, and in case of using HiFI+ also cdenker@aip.de before submitting the proposal.)

#### 3 Justification

#### Scientific Objectives of Observing Time

#### 3.1 Scientific Relevance

(Please give a statement of the scientific objectives and relevance of the requested observing campaign and describe your observing plan in some detail (instrument, spectral line, other instrument specific details). Please make sure that all necessary information is provided and that no identifying information about the PI/team is included.)

#### 3.2 Previous data

(If you were awarded observing time for a similar topic previously, summarise previous results or show the progress of your current analysis and justify why you need more observing time. If archive data are available, please justify why they cannot be used for your study.)

### 4 Observing requests:

#### 4.1 Setup requested:

(Please include the required instrument setup description and fill the checklist table based on available instruments (see below)

- GRIS: Slit-scanner or IFU (Image slicer) spectropolarimetry at wavelengths 1.0-1.3 or 1.5-1.8 microns.
- Fast context imaging below 900 nm (below 650 nm if using H-alpha Slitjaw). Specify any required filters.
- AO: GREGOR has a new AO mode (H-alpha-AO) which allows to lock the AO off-limb on prominences (if the prominence shape permits). This mode is offered on a shared-risk basis and allows to use of HIFI H-alpha 656 narrowband and GRIS He 1083 in the slit or IFU mode.
- Please state whether you plan to use the SJ imaging system.

If applicable, describe any non-standard setup. Please also list the foreseen observing mode (FOV, exposure times, duration of raster, required S/N, targets, ...)

	1.0-1.3 micron	1.5-1.8 micron	N/A
GRIS/Slit			
GRIS/IFU			
	HiFi+	BBI	N/A
Fast context imaging			
	without $H\alpha$	with $H\alpha$	N/A
Slitjaw imaging system			
	900nm	650nm	N/A
VIS/IR Beamspliter			
	Normal AO	$H\alpha$ AO	N/A
Adptive Optics			

Mark with an X in the box based on the required instrumentation.

#### Amount of days requested:

Please justify your choice

#### Coordinated observations

Please list foreseen observing coordination with other telescopes.

#### Impossible Dates:

(An attempt will be made to accommodate your "impossible time" in the schedule. Please also specify if coordinated observations are planned. There is absolutely no guarantee for success of this attempt.)