

EXWINGS Workshop

4-6 May 2026
Uppsala, Sweden



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Timetable

Timetable overview

The workshop will take place at the [Ångström Laboratory](#) in Uppsala, Sweden. All sessions will be held in room [90103](#), located on the ground floor of House 9 (the Astronomy corridor is on floor 5 of House 9). We have attempted to organise the sessions to allow cohesive scientific discussions. Each presentation will be a contributed talk lasting 15 minutes, which includes time for questions. Any further questions or discussion points can be addressed during discussion sessions.

The catered lunch on Monday, all fika breaks, and the workshop dinner on Tuesday are included. For Tuesday and Wednesday, lunch can be purchased at one of the two campus restaurants: [Rullan](#) or [Café Ångström](#). We recommend Rullan, located on the ground floor of the main building (House 10), where seats will be reserved for workshop participants. We will have our workshop dinner at [Stationen](#) on Tuesday evening, which is located conveniently near the central train station.

Day	Session	Time	Location
Monday, May the 4th	Introduction	11:15–12:15	90103
	Inner region	14:15–17:00	90103
Tuesday, 5th May	Resolved structures	09:30–12:15	90103
	Microphysics	14:15–17:00	90103
Wednesday, 6th May	Circumstellar environment	09:30–12:15	90103
	General discussion	14:15–16:00	90103

Monday, May the 4th (be with you)

11:15–11:30	Welcome remarks	
11:30–12:15	Participants introduce themselves	
12:15–14:00	Catered lunch	
Session 1	Inner region	
14:15–14:30	Michele Trabucchi University of Padova	Pulsation and evolution of AGB stars: present and future of 1D models
14:30–14:45	Kendall Shepherd University of Padova	The impact of non-linear pulsations on the mass loss and evolution on the AGB
14:45–15:00	Emelie Siderud Uppsala University	Effects of pulsation periods on wind properties in DARWIN models
15:00–15:30	Fika	
15:30–15:45	Kjell Eriksson Uppsala University	A DARWIN view on R Car
15:45–17:00	Discussion	

Tuesday, 5th of May

Session 2	Resolved structures	
09:30–09:45	Joachim Wiegert Uppsala University	Time dependent synthetic observables of 3D AGB-star-and-wind-in-a-box models
09:45–10:00	Markus Wittkowski ESO	VLT time-series and imaging of evolved stars
10:00–10:15	Bernd Freytag Uppsala University	Radiation-hydrodynamics simulations with CO5BOLD of episodic dust formation in the atmospheres of red supergiants
10:15–10:45	Fika	
10:45–11:00	Miora Andriantsaralaza Chalmers University of Technology	Periodic activity on the submillimetre surface of Mira A
11:00–11:15	Behzad Bojnordi Arbab Chalmers University of Technology	Continuum observations of R Leo atmosphere: the curious case of a transition
11:15–12:15	Discussion	
12:15–14:00	Lunch	
Session 3	Microphysics	
14:15–14:30	Ka Tat Wong Uppsala University	Rydberg transition lines in Antares
14:30–14:45	Mats André Swedish Institute of Space Physics	Ionisation and plasma physics in winds of red supergiants
14:45–15:00	Bernhard Aringer University of Vienna	The C/O ratio of carbon stars
15:00–15:30	Fika	
15:30–15:45	Susanne Höfner Uppsala University	Modelling of SiC dust in DARWIN
15:45–16:00	Josef Hron University of Vienna	MATISSE meets DARWIN: Carbon stars revisited
16:00–17:00	Discussion	
18:30–21:00	Workshop dinner at Stationen	

Wednesday, 6th of May

Session 4	Circumstellar environment	
09:30–09:45	Wouter Vlemmings Chalmers University of Technology	A magnetic mass ejection from Mira A
09:45–10:00	Mark Siebert Chalmers University of Technology	An ALMA view of RSGs in galactic open clusters
10:00–10:15	Hans Olofsson Chalmers University of Technology	Mass-loss-rate characteristics on the upper AGB and beyond: OH/IR stars in the inner Galactic Bulge
10:15–10:45	Fika	
10:45–11:00	Shazrene Mohamed University of Virginia	Unusual cool giants from binary interactions
11:00–11:15	Léa Planquart Chalmers University of Technology	Mass transfer in symbiotic stars: a closer look into the Mira system
11:15–12:15	Discussion	
12:15–14:00	Lunch	
	General discussion	
14:15–15:15	Parallel sessions/Open discussions	
15:15–15:45	Fika	
15:45–16:00	Closing remarks	

Suggested topics of discussion

Below is intended to serve as starting points for the discussion sessions.

- Pulsation
 - Phase-dependent stellar radius in Mira variables
- Dust
 - Dust formation (esp. SiC)
 - Dust-driven winds (importance thereof, modelling vs recent observational findings, other mechanisms at low MLR)
- Models vs. observations
 - An overview of what matches and what doesn't
 - Linking stellar evolution models of evolved stars with modern observations of circum-stellar environments
 - How can a dust cloud obscuring part of the star be distinguished observationally from a dark patch of cool gas just above the stellar surface?
- Binary systems
 - How binarity affects AGB evolution (pulsations, mass-loss rates, lifetimes and dust formation)

List of participants

Name	Affiliation
Mats André	Swedish Institute of Space Physics
Miora Andriantsaralaza	Chalmers University of Technology
Bernhard Aringer	University of Vienna
Behzad Bojnordi Arbab	Chalmers University of Technology
Elvire De Beck	Chalmers University of Technology
Kjell Eriksson	Uppsala University
Bernd Freytag	Uppsala University
Susanne Höfner	Uppsala University
Josef Hron	University of Vienna
Theo Khouri	Chalmers University of Technology
Matthias Maercker	Chalmers University of Technology
Shazrene Mohamed	University of Virginia
Hans Olofsson	Chalmers University of Technology
Claudia Paladini	ESO Chile
Léa Planquart	Chalmers University of Technology
Kendall Shepherd	University of Padova
Emelie Siderud	Uppsala University
Mark Siebert	Chalmers University of Technology
Michele Trabucchi	University of Padova
Wouter Vlemmings	Chalmers University of Technology
Joachim Wiegert	Uppsala University
Markus Wittkowski	ESO Garching
Ka Tat Wong	Uppsala University

Additional Information

How to get to Uppsala

Uppsala is conveniently located just north of Stockholm Arlanda Airport, from which you can take a direct train to Uppsala Central Station (approximately 17 minutes). If you are travelling from within Sweden or neighbouring countries, we recommend taking the train to Uppsala. The journey between Stockholm and Uppsala takes about 35 minutes by train.

How to get to the Ångström Laboratory

By bus: Tickets can be purchased via the [UL app](#) or on board the buses using a credit or debit card (cash is not accepted). From Uppsala Central Station, you may take the bus line **no. 4** and aim for the **Polacksbacken** stop, which is located just outside the main entrance (House 10) of the Ångström Laboratory. You can then follow [this map](#) to reach room 90103 in House 9.

Alternatively, several bus lines (1, 3, 8, 11) stop within walking distance, such as at the **Regementsvägen** stop.

On foot: If you prefer walking, the [Ångström Laboratory](#) is about 3 km from the central station, and the walk takes approximately 45 minutes, largely along the scenic path by the river Fyrisån.

How to get to our division (5th floor, House 9)

The Astronomy and Space Physics division at Uppsala University is located on the 5th floor of House 9. The main elevator on the ground floor will take you to our floor and no access card is needed (access to other floors does require a staff card). Upon reaching the 5th floor, ring the doorbell and someone from our division will let you in. In our corridor, we have access to a kitchen, small meeting rooms, and offices where you can store personal belongings, if needed.

