



## Newsletter 8 – February 2016

Dear SSALMON members.

During the last weeks, the expert teams A,B, and C have started to build up a model database and a beginning has made been made. The aim is to further fill the database with models and synthetic observations, which are useful for developing detailed observing plans for ALMA Cycle 4. The official call for Cycle 4 proposals will be released on March 22<sup>nd</sup> and the proposal deadline is already on April 21<sup>st</sup>. The ChromoAID workshop in the week before the call release will be an important opportunity for coordinating and starting on proposals. We hope to see many of you there!

### SSALMON Model Database

The aim of the SSALMON model database is to provide modelling data and tools to all teams for developing optimal observing strategies for the individual science cases and as support for interpreting future ALMA data. The foreseen test environments will be based on different kinds of numerical models but also on other chromospheric observations. So far only few models are available, among them the publically available Bifrost model snapshot of an enhanced network region. We hope that more of you will help to fill the database with useful models soon.

<http://www.ssalmon.uio.no/database/>

The data is in principle available to all registered SSALMON members under the condition that the usage of any data or tools is properly acknowledged and related publications (if existing) are referenced. You have to register for database access in order to receive an individual login and password.

Another important step is the comparison of different radiative transfer tools, which have already been used or might be used for the synthesis of intensities at ALMA wavelengths (continuum and spectral lines). For this purpose, a first benchmark has been defined, based on the provided Bifrost model snapshot. I would like to ask all members of team B but in general all of you who have access to a radiative transfer code that can calculate intensities at mm wavelengths to contribute to this effort. First maps from Linfor3D will be provided soon. More information here:

<http://www.ssalmon.uio.no/database/rtbenchmark/>

Comparing the maps from the different codes will help us to understand how the reliable the results are, which aspects should be improved and which codes are preferable and could serve as a reference. Ideally, first results would be ready for the ChromoAID meeting, where they could be discussed by those attending.

### Upcoming meetings

- **ChromoAID - The Sun's Chromosphere in the Era of ALMA, IRIS, and DKIST**,  
March 15 - 18, 2016, Boulder, CO, USA:  
<http://www.nso.edu/workshops/SunAID>  
Incl. a ALMA proposal tutorial. See also the **Boulder Solar Day** on March 14 at HAO.  
<http://www2.hao.ucar.edu/Workshop/Boulder-Solar-Day>
- **Cool Stars 19 - The Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun**,  
June 6 - 10, 2016, Uppsala, Sweden:  
<http://coolstars19.com/>  
Our session "*The solar-stellar connection in the ALMA era*" was selected and will be held on the afternoon of June 9<sup>th</sup>, 2016. More below.
- **Half a Decade of ALMA: Cosmic Dawns Transformed**  
September 20 - 23, 2016, Indian Wells, CA, USA  
<http://www.ssalmon.uio.no/meetings/>

### Cool Stars 19 in Uppsala, Sweden

The Cool Stars 19 conference includes a session on solar-stellar ALMA science. The invited speakers W.Vlemmings, S.Ramstedt, M.Shimojo and J.Linksy will give an introduction to solar/stellar observing with ALMA and an outlook on how it will help us to advance our understanding of the solar-stellar connection. We plan to have 6 contributed talks plus posters. More information and abstract submission:

<http://www.ssalmon.uio.no/soscera2016/>

### Time line - What is happening next?

March 15-18	ChromoAID workshop, Boulder, USA
March 22	Call for ALMA Cycle 4 proposals
April 18	Deadline for oral contributions for the ALMA session at Cool Stars 19
April 21	Cycle 4 proposal deadline.
June 9	Solar-stellar ALMA session at Cool Stars 19, Uppsala, Sweden
Sep. 20-13	Half a Decade of ALMA, CA, USA
Oct. 1	Cycle 4 begins.
Dec.	Most likely start of solar ALMA observing season.

With best wishes, on behalf of your SSALMON team,

*Sven Wedemeyer*

[sven.wedemeyer@astro.uio.no](mailto:sven.wedemeyer@astro.uio.no)