

D3.3 Spectral Surveys

Workshop Summary Notes



EXOHOST

Grant Agreement 101079231



Funded by
the European Union



UK Research
and Innovation

Document Control Page

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Document Title:	D3.3 Spectral Surveys Workshop Summary Notes
Project Title:	EXOHOST - Building Excellence in Spectral Characterisation of Exoplanet Hosts and Other Stars
Document Author:	Merili Jauk
Description:	Summary of the results from a workshop focused on current and upcoming spectral surveys and their applications in research
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Date of Delivery:	20.06.2024
Type:	R – Document, report
Language:	EN-GB
Rights:	Copyright EXOHOST
Sensitivity:	<input checked="" type="checkbox"/> Public <input type="checkbox"/> Limited <input type="checkbox"/> Classified
Status:	<input type="checkbox"/> In Progress <input type="checkbox"/> For Review <input type="checkbox"/> For Approval <input checked="" type="checkbox"/> Approved

Document history:

The Document Author is authorised to make the following types of changes to the document without requiring that the document be re-approved:

- Editorial, formatting, and spelling
- Clarification

To request a change to this document, contact the Document Author or Project Coordinator.

Changes to this document are summarised in the following table in chronological order (latest version last).

Revision History			
Version	Date	Created by	Short Description of Changes
0.1	10.06.2024	Merili Jauk (UTARTU)	First Draft
0.2	10.06.2024	Luca Fossati (OEAW) Eric Stempels (UU)	Amendments
0.3	11.06.2024	Anna Aret (UTARTU)	Amendments
0.4	14.06.2024	Mihkel Kama (UCL)	Amendments
1.0	20.06.2024	Merili Jauk (UTARTU)	Finalised for submission

Configuration Management: Document Location

The latest version of this controlled document is stored in [EXOHOST Sharepoint Portal](#).

Document Approver(s) and Reviewer(s):

NOTE: All Approvers are required. Records of each approver must be maintained. All Reviewers in the list are considered required unless explicitly listed as Optional.

Approvers and reviewers			
Name	Role	Action	Date
Anna Aret	Member of steering board	Reviewed, approved	14.06.2024
Luca Fossati	Member of steering board	Reviewed, approved	14.06.2024
Mihkel Kama	Member of steering board	Reviewed, approved	14.06.2024
Eric Stempels	Member of steering board	Reviewed, approved	14.06.2024



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1 Introduction

The Spectral Surveys workshop focused on presenting currently available and future spectral surveys and the opportunities they provide. The workshop was held at Ångström Laboratory, Uppsala University and had lectures by lecturers from Uppsala University, University College London, University of Toulouse and the National Research Council of Canada's Herzberg Astronomy and Astrophysics Research Centre. The workshop was designed for doctoral students, postdoctoral researchers and advanced master's students specializing in astrophysics. There were 22 participants. The workshop was financed by the EU Horizon Europe Twinning project EXOHOST and UK Research and Innovation.

1.1 Agenda

Day 1: Spectral surveys

- The PolarBase archive (Pascal Petit)
- Typical survey: proposal and observations (Adam Rains)
- Typical survey: data reduction, statistical analysis and iterative improvements (Adam Rains)
- Surveys: 1 RAVE, 2 Gaia-ESO, 3 APOGEE, 4 GALAH, 5 LAMOST, 6 WEAVE, Gaia-RVS, 4MOST, PFS, [MOONS, MSE]. The participants were asked to read a section of the following article before the workshop: Accuracy and Precision of Industrial Stellar Abundances (Paula Jofré, Ulrike Heiter, and Caroline Soubiran; 2019, Annual Review of Astronomy and Astrophysics 57, 571 / link). Section 4.2. Chemical Abundances of Spectroscopic Surveys, starting on page 596 (page 26 in PDF file), 9 pages. At the session, participants took turns giving a short oral presentation (without any slides) about each subsection of the section, covering 5 individual surveys separately and a few others together (see list above). This was followed by a discussion.
- The Virtual Observatory (JJ Kavelaars)

Day 2: Discussions (Mihkel Kama). The workshop participants worked in small teams to design observing programmes for the UT Tartu observatory, including science questions, motivation, potential targets, and observing strategy.

1.2 Lecture Materials

The lecture slides have been uploaded to Owncloud and are accessible to the general public from the EXOHOST website under the Instrumentation and Spectral Surveys Workshop event page (<https://exohost.ut.ee/instrumentation-and-spectral-surveys-workshop/>). Lecture recordings have been uploaded to EXOHOST Sharepoint and are only accessible to the consortium members.

Lecture slides can be found here:

- [Lecture slides](#) (EXOHOST Sharepoint; only accessible to project participants)
- [Lecture slides](#) (Owncloud; public, available for workshop participants and also accessible from the EXOHOST website).

Recordings of lectures can be found here:

- [Lecture recordings](#) (EXOHOST Sharepoint; only accessible to project participants)

1.3 Participants

The workshop had 22 participants from UTARTU, UU, UCL, OEAW and Vilnius University (Institute of Theoretical Physics and Astronomy). There were 18 participants on-site and 4 participants online.

The participant lists can be found in a private folder in the EXOHOST Sharepoint (only accessible to project participants): [On-site and online participants.pdf](#)

1.4 Photos of the Workshop (Photos by Camilla Thulin)



Photo 1. Group photo of the Spectral Surveys Workshop on-site participants.



Photo 2. Participants of the workshop.