

# CSI

ovvero

# Coordinamento Spettroscopia INAF

Marco Scodeggio  
INAF IASF-Milano

(on behalf of the CSI proposing team: A. Bragaglia, M. Brescia,  
S. Cristiani, A. Frasca, B. Garilli, R. Gratton, S. Lucatello,  
T. Oliva, G. Sacco, M. Scodeggio)

INAF



ISTITUTO NAZIONALE DI ASTROFISICA  
NATIONAL INSTITUTE FOR ASTROPHYSICS

Istituto di Astrofisica Spaziale e Fisica cosmica di Milano



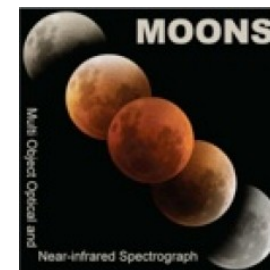
# Science with Spectroscopic Data

Over the last two decades INAF astronomers have been involved in large spectroscopic projects, many times leading them, and always playing significant roles inside these projects.



This is true both for the stellar and the extragalactic communities.

As the projects become bigger and bigger, a better integration among scientists, instrument developers, and software developers becomes fundamental to maintain a leadership role in this field.



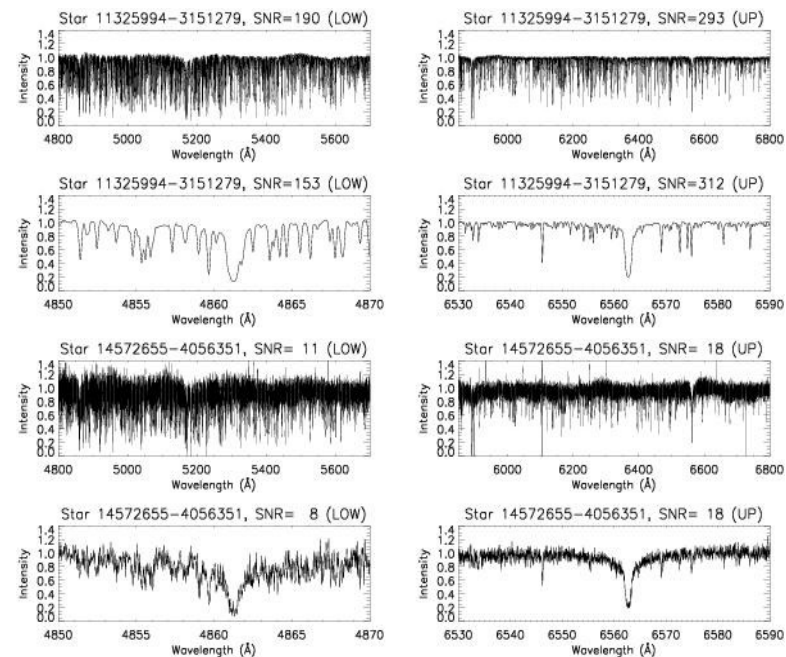
# What CSI is...

CSI has been conceived as a virtual laboratory within INAF, dedicated to Optical / Near Infrared Spectroscopy, with the goals of

1. Establishing effective **communication channels** and **working groups** that will work on specific topics related to Opt/IR Spectroscopy

2. Sharing of **tools and expertise**: first, a census of the available software and a repository to make it available to the whole INAF community; second, plan for the software tools to be improved to satisfy more stringent requirements (validation, documentation, maintenance, support, inter-operability)

3. Studying the possibility of **developing coordination, planning and collaboration** among different groups for the creation of an effective INAF spectroscopic data production chain.



ESO-GAIA example spectra

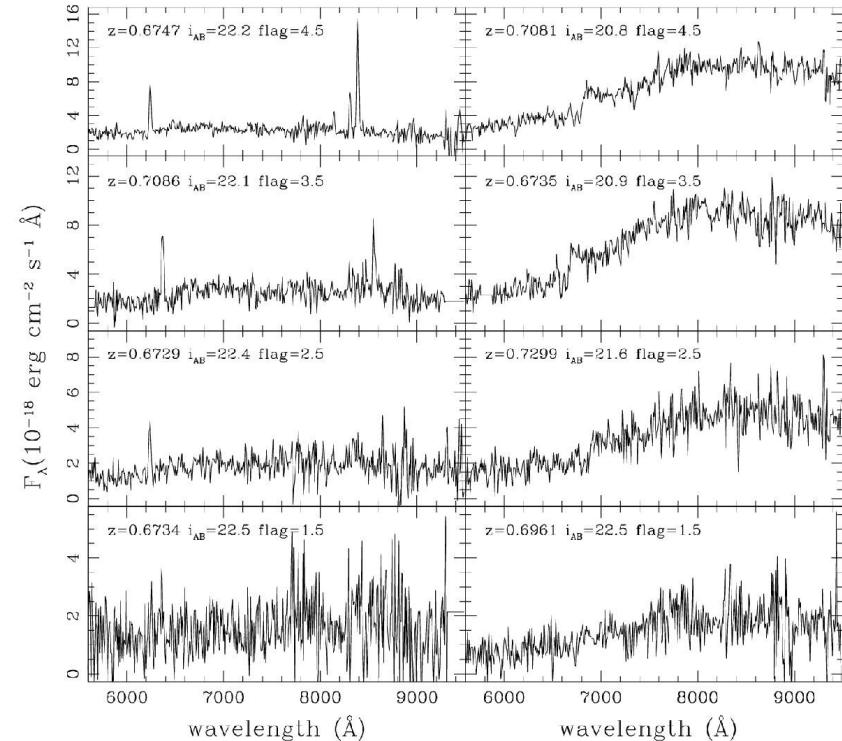
# What CSI is not...

CSI is not going to be place where new projects (either spectroscopic surveys or spectroscopic instruments) will be decided

CSI is not going to be the place where money to finance new projects will be available

CSI is not going to replace / compete against existing INAF infrastructures (like ICT)

VIPERS example spectra



# A little bit of history

The meeting “Science with multi-object spectrographs” at IASF Milano  
(Dec 12-13, 2018)

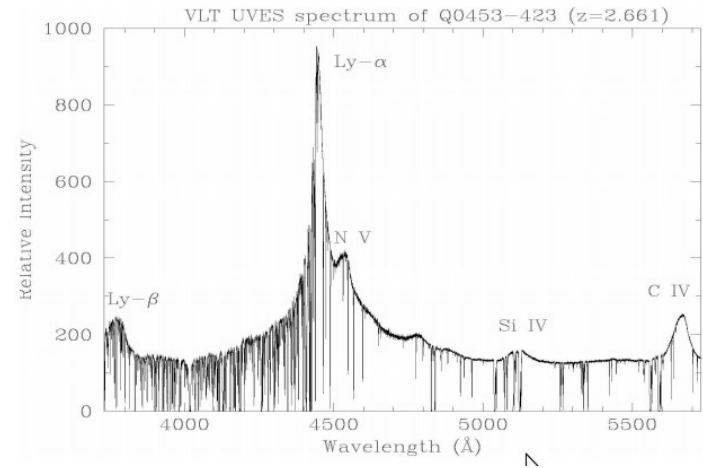
The first announcement of the idea of a Spectroscopy Lab (Mar 28, 2019)

The “Workshop Laboratorio Spettroscopia INAF” at OA Roma Monte Mario  
(Jun 10-11, 2019)

The formal CSI proposal to UTG-1 (Jun 28, 2019)

CSI approved by UTG-1 (Sept 11, 2019)

Call to participation into CSI (Oct 7, 2019)

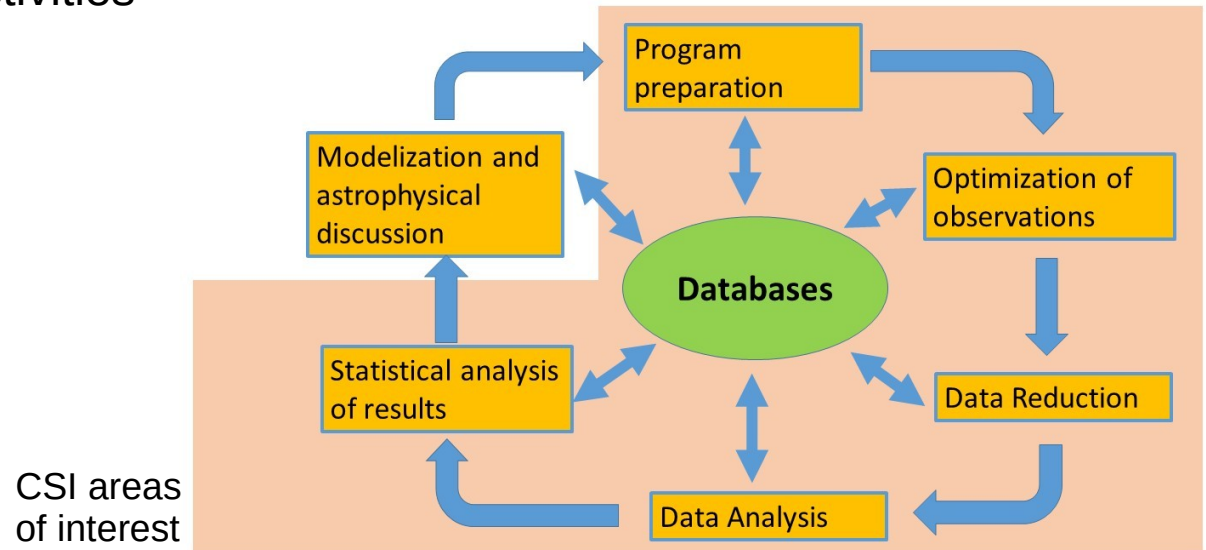


# CSI and ICT

CSI is all about the technology that is needed to do great science with spectroscopic data

Because of this there is significant overlap, and the possibility to have many synergies, with the ICT activities

Overall, we need to avoid duplications of efforts as much as possible



# CSI needs

To be effective in spreading information (but also in attracting people's interest) CSI needs to set up some sort of a project portal, addressing

Communication needs: a Web site, a Wiki (probably both)

Software needs: a software repository, with the possibility of specifying access rules

Data collection needs: a database where to store “interesting” datasets, with the possibility of specifying access rules

So, following Cristina K. terminology, what **we need** is a **Science Gateway**

# CSI timeline

We don't need everything immediately, but we can propose some indicative timeline

Ready by December 1, 2019: Web site, Wiki

Ready by April 1, 2020: Software Repository

Ready by June 1, 2020: Database

Ready by September 1, 2020: Full Project Portal



# How to join CSI

At the moment we are collecting info about fields of interest among INAF people

We have proposed 6 Working Groups as the starting point for the discussion

- **WG1** Tools for planning and assessment of observing performance
- **WG2** Tools for Data reduction
- **WG3** Data Analysis: Tools to derive physical parameters from spectra
- **WG4** Statistical analysis of results
- **WG5** Databases
- **WG6** Software validation and integration

**Want to join ?? Please go to** <https://forms.gle/HVunLeEiT7L6Ni74A>



*That's all Folks!*

l s b e r g<sup>®</sup>