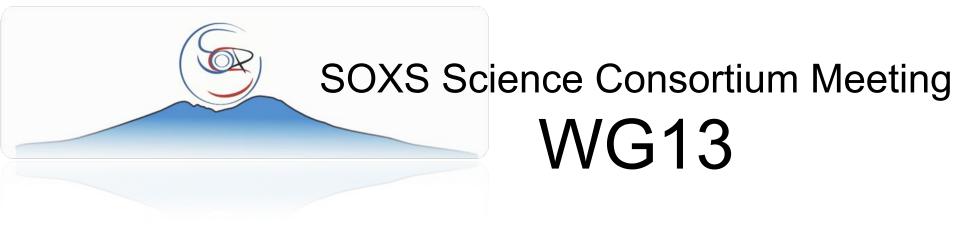


- 1. Group members, duties and activities
- 2. Survey results
- 3. Actions from the survey and suggestions for the discussion

### M.T. Botticella & S. Benetti on behalf of WG13



## **GROUP MEMBERS, DUTIES AND ACTIVITIES**

M.T. Botticella & S. Benetti on behalf of WG13

# WG13 MEMBERS

Leader: Stefano Benetti stefano.benetti@inaf.it

Deputy: Maria Teresa Botticella maria.botticella@inaf.it

about 30 members from different countries

- E. Cappellaro, N. Elias-Rosa, A. Pastorello, L. Tartaglia, L. Tomasella, A. Reguitti, I Salmaso, G Valerin
- A. Harutyunyan, L. Izzo, M. Della Valle
- S. Campana, M. Landoni, L. Asquini
- S. Piranomonte, E. Mason
- I. Arcavi
- G. Pignata, F. Bauer, J. Anderson
- S. Smartt, M Nicholl
- S. Mattila, R. Kotak, T. Kangas, H. Kuncarayaktii, S. Tsygankov, V. Neustroev, P. Charalampopoulos, T. Nagao

Anyone wishing to join, please contact Stefano

# WG13 TASKS

- Coordinating of WG activities related to the process of target classification
- Training and supporting on duty teams during operations
- Monitoring and supervising the classification results
- Improving the efficiency of the process of target classification
- Select / highlight unknowns or new classes of transients

## WG13 TASKS

### To enhance transient science with classification process

Increasing the efficiency of selection of classification targets

- broker filtering
- selection criteria for classification targets

Improving the accuracy of photometric and spectroscopic classification

- templates for the spectroscopic classification tools
- training set for Machine Learning based classifiers
- analysis of transitional transients

# **WG13 ACTIVITIES**

- □ during the preparatory phase
- during operations
- □ as SOXS proceeds

### Classification is the biggest challenge for SOXS programme



# **Preparatory phase**

Target selection	Target observations and classification	Classification data release
WGs	Scheduler and Pipeline team classification tool developers	SB and WGs

### WG13 activities

collect selection criteria plan a strategy for classification test of target injection in Marshall and scheduler coordinate the efforts

- to implement classification tools
- to collect templates from WGs
- for training of on duty teams

guidelines

draft of report for SOXS Consortium templates for TNS, GCN ...

# **Preparatory phase**

### What we did so far

- A survey to collect info from WGs on the target selection and priority criteria
- A project to implement classification tools
- A meeting on scheduler with Laura and Sergio

# Preparatory phase What we are going to do

#### In the next months

- A meeting with Marshall developers
- Simulations of the injection of classification targets in the SOXS Marshall and scheduler

#### During the commissioning phase

- A workshop dedicated to SOXS data reduction with hands-on sessions for training
  to run pipeline
  - •to properly extract 1D spectrum
  - •to use classification tools
- Dry run for on duty teams

# **Operations**

Target selection	Target observations and classification	Classification data release	
WGs	On duty team	On duty team	
WG13 activities			

support of on duty teams

supervision of classifications

database with classification statistics

# **AS SOXS proceeds**

### WG 13 activities

#### Database analysis

Check final classifications Cross-check with early-classifications for transients with uncertain classification or transitional type transients Statistical analysis for legacy projects

### New template sample

Collect NIR template and very early phase template templates for new transient classes

#### Training set sample

Selection of a sample with both well sampled light curves and spectroscopic classification

# **Questions?**