

**THE VARIABLE STAR ONE-SHOT PROJECT (VSOP):  
GOALS, TOOLS, STATUS AND SCIENCE HIGHLIGHTS**

**Maarten Baes (on behalf of the VSOP consortium)**

*Sterrenkundig Observatorium, Universiteit Gent,  
Krijgslaan 281 S9, B-9000 Gent, Belgium*

*E-mail: maarten.baes@ugent.be*

There are more than 38 000 known variable stars listed in the latest edition of the General Catalog of Variable Stars. Almost 4000 of these have no spectral type assigned and nearly 2000 are listed with an uncertain variability type, often because of lack of spectroscopic characterisation. The rate of inclusion of new variables is currently around 500 per year. To handle this continuous influx of new variable stars in a straightforward and automatic way, the Variable Star One-shot Project (VSOP), was set up. The goal of VSOP is to obtain the first spectroscopy of all unstudied variable stars in both hemispheres, using the world's leading observatories. VSOP processes incoming data, determines or revises spectral and variability type, and makes the data available to the public – all automatic, all fast. In this talk we present the philosophy and approach of VSOP, describe the tools used for automatic classification of high-resolution spectra and describe some science highlights.