## The Solar Activity Cycle: Physical Causes and Consequences

Workshop: 11-15 November 2013 ISES Solar Cycle Sunspot Number Progression ignorance about the physics of solar activity. Physical inferences from the activity indices • The interior drivers of solar activity

The Workshop objectives are to review systematically, from a physical viewpoint, all the indicators of solar activity (focussing on the Schwabe and Hale cycles) and to elaborate possible/likely/proven causal chains from the solar interior to the corona, to formulate the most likely physically based causal time sequence(s) from one solar cycle to the next (as a physical basis of predictive models), to outline the likely causes/ mechanisms of longer term memory – how solar conditions and activity parameters map from one cycle to feed through the next cycle(s), to include the topic of stellar activity cycles for a comparative study with the solar activity cycle, and to conclude about the state of knowledge/

The Workshop is structured into six sessions on:

- Solar activity indices and their interdependences a detailed review
- Magnetic feedback and magnetic flux dynamics related to solar activity
- Solar cycles, stellar cycles a comparative view of solar/stellar activity
- Drawing conclusions: the physical foundation of the solar cycle

The Workshop is convened by André Balogh (Imperial College London, UK) Hugh Hudson (SSL, University of California, Berkeley, USA) Kristóf Petrovay (ELTE, Budapest, Hungary) Rudolf von Steiger (ISSI Bern, Switzerland)

