

# Potential Hungarian contributions to ILWS

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## Space activities in Hungary

Coordinated by the Hungarian Space Office since 1992

**ESA:** not a member yet, but involved earlier in Prodex, now in PECS programmes. Ultimate goal: to become an ESA member.

**EU 6:** proposal - Integrating Space Radiation Sensing Infrastructures (ISRSI), joint research activity: SMARTNES (Survey and Modelling of Ambient Radiation and Transients in Near Earth Space)

**NASA:** general cooperation agreement (2001)

Dosimeter PILLE flown aboard Space Shuttle

## Past experience in science related to ILWS

### *Space*

Hardware experience: onboard data acquisition systems, ground support equipment

SOHO – energetic particles: COSTEP, image analysis: MIDI, EIT, CDS

Cluster – data bank (Hungarian Data Centre)

energetic particles: RAPID

magnetometer: Cluster MAG

data analysis and theoretical work on solar energetic particle

acceleration by CMEs, propagation, turbulence;

solar wind plasma-CME MHD simulations

### *Ground-based*

Continuous monitoring at geomagnetic observatories (Nagycenk,

Tihany – members of INTERMAGNET), cooperation with USGS

## Future space missions

STEREO IMPACT involvement in theoretical modeling including simulation of energetic particle propagation from the Sun to Earth

## Institutions involved

KFKI Research Institute for Particle and Nuclear Physics, Budapest

KFKI Atomic Energy Research Institute, Budapest

Astronomical Institute, Budapest – Debrecen

Eötvös Loránd University, Budapest

Technical University, Budapest

Eötvös Loránd Geophysical Institute, Budapest

Geodetic and Geophysical Research Institute, Sopron