



# SEPServer: Data Services and Analysis Tools for SEP Events and Related EM Emissions

A three-year FP-7 Collaborative Project to Develop a Server for Delivery of Data and Models for Solar Energetic Particle Events

R. Vainio for the SEPServer consortium



# Concept

SEPServer project will provide:

- Facilitated access and of key SEP data, at a single access point, in a database.
- The key EM data sets related to SEP events made available, optimised to SEP event analysis.
- Inversion methods for several SEP instruments, allowing objective determination of the “best-fit”.
- Simulation results on energetic particle acceleration and radio emission
- Browsing and visualization tools to exploit the data.
- Quality assessments data sets and analysis tools.



# Data sets (status quo)

## SEP data

- SOHO (COSTEP & ERNE)
- Ulysses (KET, LET, HI-SCALE)
- STEREO (SEPT, LET)
- Helios (E6)
- Wind (3D-P)
- ACE (EPAM, SIS)

## EM data

- Gamma and HXR data: RHESSI, INTEGRAL, Compton/BATSE
- Radio flux: Bern University
- Radio dynamic spectra: DAM, ARTEMIS, AIP, Wind
- Radio imaging: NRH



# PIs and the consortium

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# Schedule

- Negotiations with the Commission on-going
- Kick-Off: 1 October 2010 (TBC)
- User requirement phase (KO+3 mo)
- Design and Implementation of prototype
- Release of Server: August – September 2013