

# Spine Workshop

Welcome and agenda

A. Hilgers (ESA-ESTEC)

7 March 2012/AH1

SPINE M18, ESTEC

## Welcome

- SPINE is ~14 years old
  - 18 meetings held addressing spacecraft charging community needs.
  - 3 trainings
  - 6 international conferences
- => harmonised spacecraft plasma R&D programme and provides input to SEENoTC
- => SPIS (450 registered users for download)
- => maintain lists of requirements
- 18<sup>th</sup> SPINE meeting
- Today's meeting:
  - ~30 participants
  - ~20 organisations (academia & industry)

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# Agenda

## Start time 09:00

- 09:00 Welcome and introduction (A.Hilgers, ESTEC)
- 09:10 ESA upcoming tender activities (D.Rodgers, ESTEC)

## SPIS developments

- 09:20 SPIS SCIENCE progress (ONERA)
- 09:50 SPIS ELSHIELD activity (ONERA)
- 10:10 SPIS-GEO progress (Artenum)
- 10:30 Improvements in SPIS in the frame of AISEPS (M.Wartelski, Astrium F)

- 10:50 Coffee

## Research studies

- 11:20 New electric propulsion technologies investigation by simulation (M.Merino, UPM)
- 11:40 Electrodynamic tether testing and simulation (BETS) (ONERA)
- 12:00 Smart1 CRP predictions vs solar array rotation with SPIS (M.Wartelski, Astrium F)
- 12:20 LEO auroral charging analysis for the Sentinel 2 satellite (C.Imhof, Astrium, D)
- 12:40 SPIS applications for HPH.com (G.Markelov, AOES)

- 13:00 Lunch

- 14:00 Probe current collection simulation for SPIS validation (C.Hanberg, ESTEC)
- 14:20 DICTAT update for Jovian missions (D.Rodgers, ESTEC)

## R&D requirements for Technical Dossier

- 14:40 R&D requirements, (M.Wartelski, AstriumF)
- 14:55 Free discussion on R&D requirements (Chair: A. Hilgers, ESTEC)

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