

**42th COSPAR Scientific Assembly,  
14-22 July, 2018, Pasadena, California, USA**

**Report to IAA Space Debris Committee**  
T. Schildknecht, PEDAS Chair

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# COSPAR 2018 PEDAS Event

## Space Debris – Providing the Scientific Foundation for Action

- **Debris Detection, Tracking and Characterization**  
Chairs: Pat Seitzer, Thomas Schildknecht
- **Debris Environment Modeling and Risk Analysis**  
chairs: Carmen Pardini , Carsten Wiedemann
- **Debris Orbit Dynamics, Cataloguing**  
Chairs: Florent Deleflie, Srinivas Setty
- **SSA, Debris Mitigation and Remediation**  
Chairs: Jan Siminski



# COSPAR 2018 PEDAS Event

## Space Debris – Providing the Scientific Foundation for Action

- **Statistics of PEDAS at COSPAR 2018:**
  - 4 half-day sessions, plus 1 poster session
  - presentations: oral/posters  $\Rightarrow$  35/6
  - withdrawals  $\Rightarrow$  7 (3 late)/2; no-shows  $\Rightarrow$  ?/?
- **Venue of COSPAR 2020:**  
**Sydney, Australia, 15 – 23 August 2020**
- **COSPAR 2020 announcement: see special issue of “Space Research Today” (tentatively in Aug. 2019)**



# PEDAS Organization (1)

## 1. Discussion of scientific matters & coordination

- joint session on SSA with PEDAS, and NEO community, and/or other dedicated PEDAS session for 2020?

## 2. Election/appointment of PEDAS officers

- Carolin Früh (USA, chair and MSO): 2018 to 2022
- Carmen Pardini (Italy, vice-chair and DO): 2018 to 2022

## 3. Proposals for COSPAR meetings

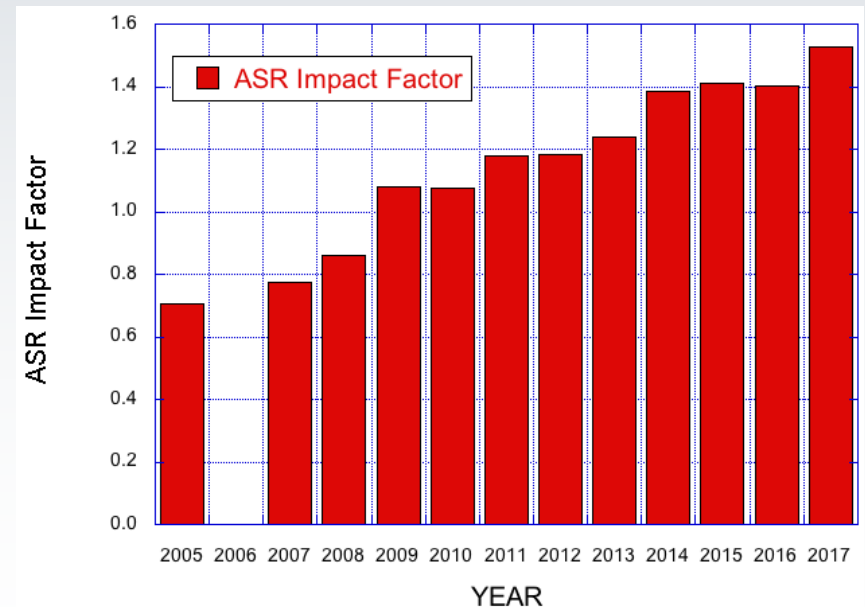
- PEDAS event proposal for COSPAR2016, Istanbul, Turkey:  
**Space Debris – Scientific Foundation Enabling Long-Term Sustainability**  
4 half-day sessions plus posters requested for PEDAS



# PEDAS-Related Publications

## 4. Preparation and publication of ASR manuscripts

- ASR has become an Elsevier “open scientific journal”, with no further event-related proceedings
- “Astrodynamics and Space Debris” (AD) is one of 9 themes
  - P. Willis (Editor-in-Chief),
  - T. Schildknecht (Assoc. Editor)
- manuscripts can be submitted at any time to “<http://ees.elsevier.com/asr>”
- manuscripts for ASR are peer reviewed





# PEDAS Organization (2)

## 6. Outstanding paper award for young scientists

- nominee must be younger than 31, and first author
- contributed papers and posters are eligible
- submissions not presented at COSPAR are eligible
- closing date for nomination: 6 months before next COSPAR meeting
- **PEDAS outstanding paper awards**  
(2<sup>nd</sup> most papers of all COSPAR topics):

**Jacco Geul (The Netherlands): *TLE uncertainty estimation using robust weighted differencing (ASR 59/10)***

**Luc Sagnières (Canada): *Stochastic modeling of hypervelocity impacts in attitude propagation of space debris (ASR 59/4)***

**Chenglin Wang (China): *Impulse calculation and characteristic analysis of space debris by pulsed laser ablation (ASR 58/9)***