

*Current and Future on Activities on  
Space Weather Education and Outreach in Europe*

Frank Jansen, Rainer Hippler  
University of Greifswald, Institute for Physics  
Space Weather Observatory (WeltraumWetterWarte - WWW), Germany  
jansen@physik.uni-greifswald.de, hippler@physik.uni-greifswald.de

Marion Jenrich  
IA - First Application in Space Weather, Science and Culture Management  
Nordwestuckermark/ Warbende, Germany  
marion.jenrich@t-online.de

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*ESTW 2002 project Space Weather and Europe SWE (2002 - 2003)*



EU/ESTW 2002 flyer and  
Zeiss-Grossplanetarium Berlin



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*... Welcome VIPs, invites people, show northern lights but also more*



ESA



EU Commission



DLR

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*Space Weather Forum: 90 minutes space weather talk show*







life in the web ...  
see under: [www.www-greifswald.de](http://www.www-greifswald.de)

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*High Light with Space Weather Life:  
Real Time Report with Astronauts on ISS*

Frank de Winne and Sergei Zolentsov

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*Space Weather exhibition  
and  
further exhibitions, s/c models from ESA, DLR, MPAe, MPE ...  
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*Further advertisement: space weather poster / Weltraumwetter Poster*



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*First European Space Weather Planetarium Show*





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Let us „hear and see“ space weather in real time:  
cosmic ray spark chamber



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First Space Weather CD-ROM



Three languages  
- English,  
- French  
- German



Interactive and  
Science Museum Edition

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MANY  
THANKS  
TO:




Additional Space Weather (PR) Events during ESTW 2002 in ...



Finland, Germany,  
Italy, Norway,  
Poland, Portugal,  
Slovakia

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### Advertisement of ESTW/SWE products, part I

Advertisements in: SWEN, new Space Weather online journal, SolarNews, AGU newsletters ...

VERY GOOD RESPONSE: world-wide scientists and radio amateurs and British teachers ...  
LESS GOOD RESPONSE: industry staffs

- 1) CD-ROM: world-wide distribution of about 23000 CD-ROM, about 750 to individual persons (Finland: educational material for high schools !)
- 2) Space Weather exhibition: travelling exhibition => Hannover, Bonn, Peenemünde (German, English and Polish text)
- 3) Space Weather poster: English and German edition
- 4) Space Weather Planetarium show: available on request (Nehru planetarium India ?) - manuskript (german speaking text), video, slides and music
- 5) Cosmic ray spark chamber: construction material available

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### Advertisement of ESTW/SWE products, part II

Further advertisements:

- a) contact
  - national popular science and public journals,
  - book editors / telescope stores,
  - planetarium /science museums
  - and mention the products
- b) contact
  - the different industry branches !
- c) all products are available on request (free of charge for scientists, others: self-cost prizes)

List of requests, emails contacts directly to SME 1A

**marion.jenrich@t-online.de**  
or **jansen@physikuni-greifswald.de**

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### Advertisement of ESTW/SWE products, part III

Details of advertisements:

- a) free of charge for scientists, teachers ...
- b) self cost price basis: CD-ROM, poster, space weather exhibition (conferences...)
- c) Planetarium show and spark chamber: low prices and negotiations
- d) rising public awareness: public campaign + detailed contacts to people in near future ...

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### Additional nearby / future education and outreach activities, part I

- 1) Proposal: European Space Weather Week (ESWW) and European Science Week (ESW) 2005

ESWW details?

ESW proposal is nearly ready for submission in 2004 - additional partners (?):  
schools and how they will be involved + institutes/science museums/ planetarium,  
also in new EU member states?

- 2) Needs for young people:
  - education at university level: not only space weather lectures / courses  
but also part of environment study (physics => astrophysics => space weather physicist)
  - education at industry level: a new skilled profession (?) - service/operation  
orientated skilled space weather worker
- 3) Industry: space weather products fair ? (like space industry fair...)

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*Additional nearby / future education and outreach activities, part II*

- 4) Fun with space weather: aurora tourism until organised from Swedish and Finnish partners and soon from German SME IA and travel agency in Greifswald (see flyers)
- 5) Lesson from several years of space weather activities and especially the last week space weather storm



**We need an European access to co-ordinate space weather outreach activities for the European public !**

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