

CURRICULUM VITAE

NAME: Plainaki Christina
NATIONALITY: Greek
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EDUCATION

1996: Graduation from High School, degree: excellent (19 and 3/9)
2001: BSc in Physics, Physics Dpt., National and Kapodistrian University of Athens, degree: very good
2004: MSc in Physics, Physics Dpt., National and Kapodistrian University of Athens, degree: excellent, Title of MSc thesis: "Ground Level Enhancements"
2007: PhD in Physics, Physics Dpt., National and Kapodistrian University of Athens, degree: excellent, Title of PhD thesis: "Solar cosmic ray physics using neutron monitor and satellite data"
Fellow of the HRAKLEITOS Project.

LANGUAGES

- **Greek:** Mother tongue
- **English:** "Cambridge Proficiency in English Certificate", University of Cambridge, UK
- **German:** "Zertifikat Deutsch als Fremdsprache (Grundstufe)", Goethe Institut Athen, Greece
- **Italian :** CELI-3, Università di Perugia, Italia.
DIPLOMA DI LINGUA ITALIANA, Istituto Italiano di Cultura, Atene, Grecia

MEMBERSHIPS

- Greek Physicists Union
- Hellenic Astronomical Society
- IEEE NSREC
- RADECS

PROFESSIONAL ACTIVITIES

January 2001-June 2002: Software Engineering in Siemens: Development and testing of ISDN Signaling between Digital Exchanges.
September 2002-May 2007: Physics and Mathematics teaching in Private Educational Centers.
September 2003-May 2004: Physics teaching in public high school-
Participation in EU program for additional educational support of high school students.
February 2006-June 2006: Supervising under graduated students in Nuclear Physics Laboratories of the University of Athens

PARTICIPATION IN RESEARCH PROJECTS

I have participated in the following projects:

- 2002-2004:** “High-energy solar event emission and its impact on physical processes in space and the earth”,
Joint Research and Technology projects/Russian Federation-Greece/Ministry of Development-General Secretariat of Research and Technology (grant 70/3/6255)
- 2003-2004:** “Energy dependence of relativistic solar proton events”
Special Research Account of Athens University (grant 70/4/5803)
- 2003-2004:** ENTER 01ER87 ‘Development of Neutron Monitor Network in real time’
Ministry of Development-General Secretariat of Research and Technology (grant 70/3/6830)
- 2003-2006:** HRAKLEITOS “ Physics of solar cosmic rays using data from Neutron Monitor and ARTEMIS-IV radio-spectrograph of Athens University”
Funded by European Social funds and National Sources (grant 70/3/7218)
- 2004:** PYTHAGORAS II ‘Space Weather forecasting using cosmic ray data from the Neutron Monitor Network in real time of the Athens University’
Funded by European Social funds and National Sources Project (grant 70/3/7979)
- 2004:** PYTHAGORAS I ‘Dynamical variations of energetic charged particles on the magnetospheric planet boundaries of Jupiter and Earth’.
Funded by European Social funds and National Sources

PARTICIPATION IN CONFERENCES

1. Hellenic Astronautical Society 2nd International Conference Space Applications and Environment, Aigeira, Greece, May 5-9 2000.
2. Hellenic Astronautical Society 2nd International Conference Space Applications and Environment, Aigeira, Greece, May 5-9 2000.
3. Advanced Study Institute on Space Storms Weather Hazards, Hersonisos, Crete, 19-29 June, 2000.
4. 6th Hellenic Astronomical Conference, Pentele, Athens, 15-17 September 2003.
5. 10th Hellenic Physics Conference, Loutraki – Greece, 29 Ιαν.– 1 Φεβρ.2004:
6. 35th COSPAR Scientific Assembly 2004, Paris, France, 18-25 July 2004
7. EGU – General Assembly 2005, 24-29 April 2005, Vienna, Austria
8. 11^o Hellenic Physics Conference, Larisa, Greece, 31 March-2 April, 2006.
9. 6th Hellenic Nuclear Physics Symposium, University of Athens, Physics Dpt., 27-29 May, 2006
10. 20th European Cosmic Ray Symposium, Lisbon, Portugal, 5-8 September, 2006.
11. RADECS 2006 Workshop, Athens, Greece, 27-29 September, 2006.
12. The Second Solar Orbiter Workshop, Athens, Greece, 16-20 October, 2006
13. COST724-Workshop, Athens, Greece, 2-4 April, 2007.

SCHOOLS OF PHYSICS

1. **International School on Astro Particle Physics (ISAPP) 2003**, Madonna di Campiglio, Italy: 14-19 July 2003.
2. **Analysis techniques for turbulent plasmas**, Copanello, Italy, 28 Sept.-2 Oct. 2004.
3. **High Performance and Grid Computing 2005**, Center of Excellence for High Performance Computing, University of Calabria, Italy, 7 - 24 March 2005
4. **International School on Astro Particle Physics (ISAPP) 2005**, Belgirate, Lago Maggiore, Italy, 30 June – 9 July 2005.

5. **Turbulence and Fine Scale Structure in Solar and Astrophysical Plasmas**, Florence, Italy, 3-7 October 2005.
6. **First X-Ray Astronomy School**, National Observatory of Athens- Institute of Astronomy and Astrophysics, Penteli, Greece, September 18-20, 2006.

COMPUTER KNOWLEDGE

Languages: Assembly, Pascal.

Software: Matlab 7, Mathematica 4.1, Origin.

OTHER ACTIVITIES

1999: Diploma in Piano, Hellenic Conservatory, Amarousion Department, Greece, degree: excellent **2000:** Diploma in Harmony of Music, Conservatory of Modern Music, Amarousio, Greece, degree: excellent

2001: Patent in Telecommunications entitled “Emergency Call identified by A-subscriber”, Siemens. The patent was awarded.

INTERESTS

Music, languages, traveling

LIST OF PUBLICATIONS

PUBLICATIONS IN CONFERENCE PROCEEDINGS

1. Mavromichalaki, H. and **C.Plainaki**,: ‘The Leonid Meteor Shower’
ASI Space Storms and Space Weather Hazards Conference (Hersonisos), 2000, 89.
2. Mavromichalaki, H. and **C. Plainaki**: ‘An over all review of the Leonid Meteor Shower’
Proc. 2nd Intern. Conf. Space Applications and Environment (Aigeira,), 2000, 76.
3. **Plainaki** and H. Livaniou: Stellar pulsations in Solar like stars: An observational overview, Proc. 2nd Inter. Conf. Space Applications and Environment (Aigeira), 2000, 188.
4. Mavromichalaki, H., B. Petropoulos, **C. Plainaki**, I. Zouganelis, A. Vassilaki: ‘High Resolution studies of Coronal Index and Solar Magnetic fields of solar activity’
Proc. ISCS “Solar Variability as an input to the earth’s environment” Conf., Lomnicka, Slovakia, 23-29 June 2003
5. Caroubalos, C., X. Moussas, P. Preka-Papadema, A. Hillaris, I. Polygiannakis, H. Mavromichalaki, C. Sarlanis, G. Souvatzoglou, M. Gerontidou, **C. Plainaki**, S. Tatsis, S.N. Kuznetsov, I. N. Myagkova, K. Kudela: ‘Space storm measurements of 17 and 21 April 2002 Forbush effects from ARTEMIS-IV solar radio-spectrograph, Athens Neutron Monitor station and CORONAS- F satellite’
Proc. 6th Hellenic Astronomical Conference, Pentele, Athens, 81, 2004.
6. Mavromichalaki, H., C. Sarlanis, G. Souvatzoglou, S. Tatsis, M. Gerontidou, **C. Plainaki**, A. Belov, E. Eroshenko, V. G.Yanke: ‘Forecast of solar flare particle events from the Neutron Monitor Network in Real Time’
Proc. of 6th Hellenic Astronomical Conference, Pentele, Athens, 340, 2004.

7. Mavromichalaki, H., **C. Plainaki**, M. Gerontidou, G.Souvatzoglou, C.Sarlanis, G. Mariatos, S.Tatsis, A.Belov, E.Eroshenko, V.G.Yanke:
'Magnetospheric cosmic ray events recorded by Athens neutron monitor in period 2000-2003'
Proc. 10th Conference on Physics of the Greek Physicists Union, 29, 2004.
8. Souvatzoglou, G., C.Sarlanis, G. Mariatos, H.Mavromichalaki, **C. Plainaki**, M. Gerontidou, S.Tatsis, A.Belov, E.Eroshenko, V.G.Yanke:
'The worldwide "real-time" neutron monitor network in Athens and its applications'
Proc.10th Conference on Physics of the Greek Physicists Union, 115, 2004.
9. Caroubalos, C., X.Moussas, H.Mavromichalaki P.Preka-Papadema, G.Souvatzoglou, C.Sarlanis, A.Hillaris, A. Kontogeorgos, P. Tsitsipis, I.Polygiannakis, M.Gerontidou, **C.Plainaki**, K. Alisandrakis, S.Tatsis, J.L.Bougeret, G. Dumas:
'Solar, interplanetary and geomagnetic storm on 28 October 2003: Observations of solar radiobursts and cosmic ray events by ARTEMIS solar radio-spectrograph and Athens Neutron Monitor'
Proc. 10th Conference on Physics of the Greek Physicists Union, 65, 2004.
10. Belov A.V., Eroshenko E.A., Oleneva V.A., Yanke V.G., Mavromichalaki H., **Plainaki Ch.**, Mariatos G:
'Cosmic Ray Variations During Two Greatest Bursts of Solar Activity in the 23-rd Solar Cycle'
International Symposium on Solar Extreme Events of 2003 Moscow, Russia, July 2004.
11. **Plainaki, C.**, A. Belov, E. Eroshenko, V.Kurt, H. Mavromichalaki, V.Yanke:
'Unexpected burst of solar activity recorded by neutron monitors during October-November 2003'
35th COSPAR Scientific Assembly. Held 18 - 25 July 2004, in Paris, .2696, 2004.
12. Belov, A., E. Eroshenko, H. Mavromichalaki , **C. Plainaki**, V.Yanke:
'A study of the ground level enhancement of 23 February 1956'
35th COSPAR Scientific Assembly. Held 18 - 25 July 2004, in Paris, 2986, 2004.
13. Mavromichalaki, H., G. Souvatzoglou, C. Sarlanis, G. Mariatos, M. Gerontidou, A. Papaioannou, **C. Plainaki**, S. Tatsis, A. Belov, E. Eroshenko, V. Yanke:
'The new Athens Center on data processing from the Neutron Monitor Network in real time',
First European Space Weather Week 2004, ESA/ESTEC, The Netherlands
14. Mavromichalaki, H., Petropoulos, B. **Plainaki, C.**, Dionatos O., Zouganelis,I.:
'Coronal Index as a Solar Activity Index Applied to Space Weather'
35th COSPAR Scientific Assembly. Held 18 - 25 July 2004, in Paris, 2269, 2004.
15. Mavromichalaki, H., G. Souvatzoglou, C. Sarlanis, G. Mariatos, **C. Plainaki**, M. Gerontidou, A. Belov, E. Eroshenko and V. Yanke:
'Space weather prediction by cosmic rays'
35th COSPAR Scientific Assembly, 18 - 25 July 2004, in Paris, 3845, 2004.
16. Mavromichalaki, H., **C. Plainaki**, A. Belov, E. Eroshenko, V. Kurt, V. Yanke:
'Ground level enhancements of solar cosmic rays in October-November 2003'
Conference on Technology development in Physics, Greek Physicists Union, Cyprus, 2005.
17. **Plainaki, C.**, H. Mavromichalaki, A. Belov, E. Eroshenko, V. Yanke:
'The recent ground level enhancement of solar cosmic rays in January 2005'
EGU General Assembly-2005, Vienna, Geophys. Res. Abstracts, 7, 07305, 2005.
18. Mavromichalaki H., **Plainaki C.**, Mariatos, A. Belov A., Baisultanova L., Eroshenko E, Yanke V, Pchelkin V G.:
'Magnetospheric effects in cosmic rays during the unique magnetic storm on November 2003'
EGU General Assembly, Vienna, Geophys. Res. Abstracts 7, 07717, 2005.
19. Belov A. V., Eroshenko E. A., Mavromichalaki H., **Plainaki Ch.**, Yanke V. G.:
'Ground level enhancement of the solar cosmic rays in January 20, 2005'

International Symposium on Solar Extreme Events of 2005, Armenia, 26-30 September 2005.

20. Eroshenko Eugenia, Belov A., Mavromichalaki H., **Plainaki Ch.**, Yanke V.:
'Ground level enhancement of the solar cosmic rays on January 20, 2005'
Proc. 29th Intern. Cosmic Ray Conf., Pune, 1, 189, 2005.

21. Papaioannou, A., M. Gerontidou, G. Mariatos, H. Mavromichalaki, **C. Plainaki**: Unusually cosmic ray events in July 2005'
'Second European Space Weather Week, 14-18th November 2005 , ESA/ESTEC, Noordwijk, The Netherlands'
Online proceedings at: <http://esa-spaceweather.net/spweather/workshops/eswwII/esww2-proceedings.html>

22. **Plainaki, C.**, H. Mavromichalaki, L. Dorman:
'Neutron Monitor capabilities in studying space physics'
Proc. 11^o Hellenic Physics Conference, Larisa, 2006.

23. Papaioannou, A., H. Mavromichalaki, M. Gerontidou, G. Mariatos, **C. Plainaki** :
'Irregular variations of cosmic ray intensity in July 2005: A preliminary explanation'
Proc. 11th Pan-Hellenic Conference on Physics, Larissa, 2006.

24. **Plainaki, C.**, A. Belov, E. Eroshenko, H. Mavromichalaki, V. Yanke:
'Study of the ground level enhancement of 20 January 2005'
Proc 20th ECRS-2006, Lisbon, 2006.

25. Mavromichalaki, H., **C. Plainaki**, M. Gerontidou, C.Sarlanis, G. Souvatzoglou, G. Mariatos, A. Belov, E. Eroshenko, E. Klepach and V.Yanke:
'GLEs as a Warning Tool for Radiation Effects on Electronics and Systems: A new Alert System based on Real-Time Neutron Monitors'
Proc. RADECS 2006 Workshop, Athens, 2006.

26. Plainaki, C., Belov, A., Eroshenko, E., Mavromichalaki, H., Yanke, V.:
'Magnetospheric optics for solar cosmic rays producing ground level enhancements' The Second Solar Orbiter Workshop, Athens, Greece, 2006

27. Papaioannou, A., **Plainaki, C.**, Papailiou, M., Gerontidou, M., Mavromichalaki, H.:
'The effect of Cosmic Radiation on the near-earth space'
10th Conference on Physics of the Greek and Cypriot Physicists, Corfu, Greece, 2007.

28. **Plainaki, C.**, Papaioannou, A. and Mavromichalaki, H.:
"Study and Modeling of Forbush Decreases of Galactic Cosmic Rays"
10th Conference on Physics of the Greek and Cypriot Physicists, Corfu, Greece, 2007.

29. **C. Plainaki** :
'NM Bangle model for GLEs real-time analysis'
Athens COST-724 Workshop: 'Real Time database for Neutron Monitors', Athens,
<http://cosray.phys.uoa.gr/COST%20724%20Workshop%20Site/index.htm>, 2007

30. **Plainaki, C.**, Mavromichalaki, H., Belov, A., Eroshenko, E., Yanke, V.:
"Application of the NM-BANGLE model to GLE70"
Proc. 30th Intern. Cosmic Ray Conf., Merida, 2007.

31. H. Mavromichalaki, M. Gerontidou, G. Mariatos, M. Papailiou, A. Papaioannou, **C. Plainaki**, C. Sarlanis, G. Souvatzoglou:
"Athens Neutron Monitor Data Processing Center - ANMODAP Center"
"50 years from the beginning of continuous cosmic ray registration" Workshop, 30th Intern. Cosmic Ray Conf., Merida, <http://www.icrc2007.unam.mx/workshops>, 2007.

PUBLICATIONS IN JOURNALS

1. Mavromichalaki, H., **C. Plainaki**, I. Zouganelis, B. Petropoulos:
'An empirical model of the daily evolution of the coronal index'
Solar Physics, 218 (1), 63, 2004.
2. **Plainaki**, C., A. Belov, E. Eroshenko, V. Kurt, H. Mavromichalaki, V. Yanke:
'Unexpected burst of solar activity recorded by neutron monitors during October- November 2003'
Adv. Space Res., 35, 4,691-696.
3. Belov, A., E. Eroshenko, H. Mavromichalaki , **C. Plainaki**, V. Yanke:
'A study of the ground level enhancement of 23 February 1956'
Adv. Space Res., 35, 4, 697-701, 2005.
4. Mavromichalaki, H., Petropoulos, B., **Plainaki**, C., Dionatos O., Zouganelis, I
'Coronal Index as a Solar Activity Index Applied to Space Weather'
Adv. Space Res., 3, 410-415, 2005.
5. Eroshenko, E., Belov, A., Mavromichalaki, H., Mariatos G., Oleneva, V., **Plainaki**, C., Yanke, V.:
'Cosmic ray variations during the two great bursts of solar activity in the 23rd solar cycle'
Solar Phys. 224, 345-358, 2004.
6. Mavromichalaki, H., G. Souvatzoglou, C. Sarlanis, G. Mariatos, M. Gerontidou, A. Papaioannou, **C. Plainaki**, S. Tatsis, A. Belov, E. Eroshenko, V. Yanke:
'The new Athens Center on data processing from the Neutron Monitor Network in real time',
Annales Geophysicae, 23, 1-8, 2005
7. Belov A., Baisultanova L., Eroshenko E., Mavromichalaki H., Yanke V, Pchelkin V, **Plainaki** C., Mariatos G.:
'Magnetospheric effects in cosmic rays during the unique magnetic storm on November 2003'
Journal of Geophysical Research-Space Physics, 110, A9, CiteID A09S20, 2005.
8. Belov, A., E. Eroshenko, H. Mavromichalaki , **C. Plainaki**, V. Yanke:
'Solar cosmic rays during the extremely high ground level enhancement on February 23, 1956'
Annales Geophysicae, 224, 345-358, 2005
9. Mavromichalaki, H., M. Gerontidou, G. Mariatos, **C. Plainaki**, A. Papaioannou, C. Sarlanis, G. Souvatzoglou, A. Belov, E. Eroshenko, V. Yanke and S. Tsitomeas:
'Space Weather forecasting by the new Athens Center: The recent Extreme Events of January 2005'
IEEE TRANSACTIONS for Nuclear Science 52, 6, 2307-2312, 2005
10. Mavromichalaki, H., G. Souvatzoglou, C. Sarlanis, G. Mariatos, **C. Plainaki**, M. Gerontidou, A. Belov, E. Eroshenko and V. Yanke:
'Space weather prediction by cosmic rays'
Adv. Space Res., 6, 1141-1147, 2006.
11. **Plainaki**, C., A. Belov, E. Eroshenko, H. Mavromichalaki, V. Yanke:
'Modeling ground level enhancements: the event of 20 January 2005'
Journal of Geophysical Research-Space Physics, 112, A04102, doi:10.1029/2006JA011926, 2006.
12. Mavromichalaki, H., C. Sarlanis, G. Souvatzoglou, G. Mariatos, M. Gerontidou, **C. Plainaki**, A. Papaioannou, S. Tatsis:
'The new Athens center applied to space weather forecasting'
Recent Adv. In Astronomy and Astrophysics, AIP, 848, 837-846, 2006.
13. **Plainaki**, C., H. Mavromichalaki, A. Belov, E. Eroshenko, V. Yanke:
'Modeling of the solar energetic particles recorded at Neutron Monitors'

Recent Adv. In Astronomy and Astrophysics, AIP, 848, 258-262, 2006.

14. Mavromichalaki, H., **Plainaki, C.**, Gerontidou, M., Sarlanis, C., Souvatzoglou, G. Mariatos, G., Belov, A., Eroshenko, E., Klepach, E. and Yanke, V.:

‘GLEs as a warning tool for radiation effects on electronics and systems: A new Alert System based on real-time Neutron Monitors’

IEEE TRANSACTIONS for Nuclear Science, 2007 (in press).

RECOMMENDATION LETTERS

Available on request

July 2007