

List of scientific activities

Assen Tchorbadjieff, INRNE-BAS

1. PhD Research

1.1. Disertation defence – Sofia, 27.11.2013

1.2. Research papers:

1.2.1. D. Roša, Ch. Angelov, K. Arakelyan, T. Arsov, K. Avakyan, A. Chilingarian, S. Chilingaryan, A. Hovhanissyan, T. Hovhannisyan, G. Hovsepyan, D. Sargsyan, D. Hržina, I. Kalapov, T. Karapetyan, L. Kozliner, B. Mailyan, D. Maričić, A. Nishev, D. Pokhsranyan, A. Reymers, I. Romštajn, J. Stamenov, A. Tchorbadjieff and L. Vanyan; *SEVAN CRO Particle Detector for Solar Physics and Space Weather Research*; *Cent. Eur.Astrophys.Bull.* 34 (2010) 1, p.115–12 – **1 citation**

1.2.2. A.Tchorbadjieff; „Automatic data quality control of environmental data”; *Lecture Notes in Computer Science (LNCS)*, Springer, Vol. 7116 p.333-341 (2012) **SJR(2011) – 0.331; SNIP(2011) -0.545 – 1citation**

1.2.3. A.Tchorbadjieff, J. Stamenov, at.al. „Detection of Solar particle events in March 2012 at BEO Moussala”, *Bulgarian Astronomical Journal Volume* 18-2 (2012) p.74-83

1.2.4. A.Tchorbadjieff, at.al., *Ground Detection in Moussala of Coronal Mass Ejections (CMEs) March-April 2012* „Proceedings of the Bulgarian Academy of Sciences” (**IF 0.21**) V.66 No5 pp.659-666

1.3. Conferences and symposiums:

1.3.1. NATO Advanced Study Institute on Information Security and Related Combinatorics – 30 May -11 June 2010 r. Opatija, Republic of Croatia

1.3.2. 8th International Conference on "Large-Scale Scientific Computations" 6-10 June 2011, Sozopol, Bulgaria, talk - „Automatic data quality control of environmental data”

1.3.2. International Symposium on Recent Observations and Simulations of the Sun-Earth System II (ISROSES-II) – 11-16 September 2011, Borovets, Bulgaria, poster, „Multivariate Probability Model for Ground Detection of Cosmic Rays”

1.3.3. 5th Croatian Mathematical Congress, June 18-21, 2012, Rijeka, Croatia, section Probabilities and Statistics, talk - „Probability estimation of branching processes in atmosphere cosmic ray cascades”.

1.3.4. The 8th General Conference of Balkan Physical Union, 5-7 July 2012, Constanta, Romania. Poster - „Ground Detection in Moussala of Coronal Mass Ejections (CMEs) March-April 2012” and talk „Stochastic analysis of earth detected Coronal Mass Ejections (CMEs) March-April 2012”.

2. General Research

2.1. Papers

2.1.1. A.Tchorbadjieff, “Automatic data quality control for environmental measurements”, *Lecture Notes in Computer Science (LNCS)*, Springer, **SJR(2011) – 0.331; SNIP(2011) -0.545**, Accepted 2014.

2.1.2. A.Чорбаджиев, at.al., “Мусала (2925m a.s.l.) – високопланинска точка за измерване на космични лъчи”, *e-print 2nd National Congress on Physical Sciences*, 25-29 September 2013, Sofia

, Section: Physics of Earth, Atmosphere and Space

2.1.3. Christo Angelov, Assen Tchorbadjieff, at.al., “BEO Moussala Station (2925m a.s.l.) – a High Mountain Point for POPs, Aerosols and Greenhouse Gas Measurements”, *e-print 2nd National Congress on Physical Sciences*, 25-29 September 2013, Sofia

, Section: Physics of Earth, Atmosphere and Space

2.1.4. A. Chilingarian, Ch. Angelov, A. tchorbadjieff, at.al., “*New Particle Detector Network for Solar Physics and Space Weather research*“, e-print: *PROCEEDINGS OF THE 31st ICRC, ŁODZ 2009*

2.2. Conferences and symposiums

2.2.1. International Workshop Methods of Chaos Detection and Predictability Theory and Applications, 17 - 21 June 2013, Drezden, poster - “*Risk models for cosmic rays particle flux*”

2.2.2. Second National Congress On Physical Sciences, 25-29 September 2013, Sofia, Talk „*Moussala station (2925m a.s.l.) a High Mountain point for cosmic ray measurements*“

2.2.3. 9th International Conference on "Large-Scale Scientific Computations", Sozopol 2013, Talk - „*Computational Stochastic Modeling for Real-time Environmental Applications* „

2.2.4. 4th ACTRIS General Meeting , June 10-13, 2014, Clermont-Ferrand, France, Talk „*Mineral dust aerosols from the Sahara desert over Moussala in the period 2011 and 2013*“

3. Research in Ecology

3.1. Papers

3.1.1. Christo Angelov, Nina Nikolova, Ivo Kalapov, Todor Arsov, Asen Tchorbadjieff, Aneta Boyadjieva, Stefan Tsakovski, Petra Přibylková, Petr Kukučka, Jana Boruvková, Jana Klánová , „*High-Mountain Monitoring of Persistent Organic Pollutants at the Basic Environmental Observatory Moussala*“, *Proceedings of the Bulgarian Academy of Sciences*, (**IF 0.21**) V.67 No8 pp.1129-1136 -

3.1.2. Chvetomir Angelov, Jordan Stamenov, Asen Tchorbadjieff, at.al. , “*BEO Moussala – A New Facility for Complex Environment Studies*“, *Sustainable Development in Mountain Regions* , Springer, 2011, 123-139 - **2 citations**

3.1.3. Илия Пенев, Христо Ангелов, Стефан Георгиев, Асен Чорбаджиев, Радиационният фон в района на вр. Мусала, БЕО Мусала, след инцидента “Фукушима”, “Доклади на БЯД”, том 16, бр.2, 2011, p 15-19

3.1.4. J. Stamenov, Asen Tchorbadjieff, at.al., “*Basic Environmental Observatory (BEO) at Moussala Peak – High Mountain Station for Complex Monitoring Studies*“, *Journal of Balkan Ecology*, 2010, vol 13, No2,

4. List of citations

4.1. **Citation on 1.2.1.** Maricic, D, at.al., “*The Successive CME on 13th; 14th and 15th February 2011 and Forbush decrease on 18 February 2011*“, *Journal of Physics: Conference Series*, Volume 409, Issue 1, article id. 012158 (2013)

4.2. **Citation on 1.2.2.** Nuria Castell, at.al., “*Mobile technologies and services for environmental monitoring: The Citi-Sense-MOB approach*“, *Urban Climate* , accepted August 2014, Article in press.

4.3. **Citation on 3.1.2.** E Andrews, at.al. “*Climatology of aerosol radiative properties in the free troposphere*“, *Atmospheric Research*, Volume 2012, Issue 4, December 2011, Pages 365–393

4.4. **Citation on 3.1.2** C Zhou, at.al. “*A correlation analysis of monthly mean CO₂ retrieved from the Atmospheric Infrared Sounder with surface station measurements*“, *International Journal of Remote Sensing*, Volume 34, Issue 24, 2013