

*Crustal and upper mantle heterogeneities beneath the East European Craton: implications from EM studies.*

*University of Oulu, Department of Physics, Geophysics Group, 20-23 October, 2009*

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***Crustal and upper mantle heterogeneities beneath the East European Craton: implications from EM studies.***

Seminar in the University of Oulu, Department of Physics, Geophysics Group  
20-23 October, 2009

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***Lecture room:*** GF319 (geophysics)

***Equipments:*** blackboard, overhead projector, data projector

***Working hours:*** Tue 20 October 10:00 -> EM  
Wed 21 October 10:00 -> EM  
Thu 22 October 10:00 -> non-EM & EM  
Fri 23 October 09:00 -> EM

***Meals:*** Several restaurants in campus; time will be selected during seminar

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***Tuesday 20 Oct and Wednesday 21 Oct, 2009***

***Friday 23 Oct, 2009***

- Starting time on Tuesday and Wednesday 10:00
- Starting time on Friday 09:00
- Talks and posters (electromagnetic studies)
- N.B. Presentations in random order in the list below; final schedule during the seminar

- (1) *Average LMT responses between Voronezh Massive and Ukrainian Shield*  
*Elena Sokolova, Ivan Varentsov and KIROVOGRAD WG*  
IGEMRAN, Troitsk, Moscow
- (2) *AMT/MT measurements in the Central Lapland Greenstone Belt*  
*Ilkka Lahti*  
Geological Survey of Finland, Rovaniemi
- (3) *Two-dimensional interpretation of magnetotelluric data from Central-Karelian and Belomorian blocks and their transition zone*  
*Maria Cherevatova*  
Saint-Petersburg University, Physics Faculty
- (4) *EM array measurements - multivariate approach and EMMA data*  
*Maxim Smirnov*  
University of Oulu, Department of Physics, Geophysics Group
- (5) *EM response on typical upper mantle structure in Precambrian cratons: case study*  
*Nick Palshin, Igor Yegorov and Alla Nozdrina*  
Shirsov Institute of Oceanology, RAS, Moscow
- (6) *The fine structure of Pi2 pulsations from the BEAR experiment*  
Petlenko A.V., Kopytenko Yu.A., SPbF IZMIRAN, RAS, St. Petersburg  
presented by *A.A. Zhamaletdinov*

(7) *Technique to reduce  $S_q$ -influence and selected MT cluster responses from the EMTESZ-Pomerania array*  
*Ivan Varentsov* and EMTESZ-Pomerania WG  
IGEMRAN, Troitsk, Moscow region

(8) *GRABLOX demonstration*  
*Markku Pirttijärvi*  
University of Oulu, Department of Physics, Geophysics Group

(9) *Updating the SMAP*  
*Toivo Korja*  
University of Oulu, Department of Physics, Geophysics Group

*On Friday 23 Oct, 2009; starting time 09:00*

(10) *MT Data of Volvi Area, Greece. 3D vs 2D*  
*Alexandros Savvaidis*  
Institute of Engineering Seismology & Earthquake Engineering, Greece

*POSTERS with possible brief introductions*

(11) *Comparison of techniques to extract geomagnetic field components from array of induction arrows using spline Hilbert transform for the EMTESZ-Pomerania data*  
Waldek Jozwiak, Kovacikova S., Nowozynski K., *Varentsov Iv.*

***(12) Super Deep CSMT Sounding of Fennoscandian (Baltic) Shield with the use of Industrial Power Lines (experiment FENICS-2007)***

*Abdoulkhay A. Zhamaletdinov*, Shevtsov A.N., Korotkova T.G., Efimov B.V., Barannik M.B., Kolobov V.V., Prokopchuk P.I., Kopytenko Yu.A., Ismagilov V.S., Smirnov M.Yu., Vagin S.A., Tereschenko Ye.D., Vasiljev A.N., Gokhberg M.B., T. Korja  
Geological Institute of the Kola, RAS, Apatity

***(13) Results of CSAMT sounding on the Central Finland Granitoid Complex and their comparison with MT-AMT data on the SVEKA profile***

*Abdoulkhay A. Zhamaletdinov*, Shevtsov A.N., T.Korja, L. B. Pedersen  
Geological Institute of the Kola, RAS, Apatity

*Thursday 22 Oct, 2009*

- Starting time 10:00
- Talks (non-EM & EM general)
- fixed order of presentations

*(1) Extensional events in the Fennoscandian lithosphere*

*Annakaisa Korja*

University of Helsinki, Institute of Seismology

*(2) Lithosphere structure of the Fennoscandian Shield from active and passive seismic experiments*

*Elena Kozlovskaya*

University of Oulu, Sodankylä Geophysical Observatory

*(3) Temperature constraints in the Fennoscandian Shield*

*Kari Moisio*

University of Oulu, Department of Physics, Geophysics Group

*(4) The Moho boundary and hidden crustal root beneath the Lapland-Kola Orogen in northern Fennoscandia: multidisciplinary analysis*

*Elena Kozlovskaya, Hanna Silvennoinen and Tomasz Janik,*

University of Oulu, Sodankylä Geophysical Observatory

*(5) Theoretical and experimental constraints on upper mantle conductivity of Precambrian craton*

*Nick Palshin*

Shirsov Institute of Oceanology, RAS, Moscow

*(6) Progress report on the KIROVOGRAD project*

*Elena Sokolova* and *Ivan Varentsov* , representing KIROVOGRAD WG  
IGEMRAN, Troitsk, Moscow region

*(7) Progress report on the EMTESZ-Pomerania project*

*Ivan Varentsov* representing EMTESZ-Pomerania WG  
IGEMRAN, Troitsk, Moscow region

*(9) Electrical conductivity of the margins of the Fennoscandian Shield*

*Maxim Smirnov*  
University of Oulu, Department of Physics, Geophysics Group

*(9) Lithosphere and asthenosphere in Fennoscandia and surrounding areas*

*Toivo Korja*  
University of Oulu, Department of Physics, Geophysics Group