

Milutin Milanković



SERBIAN ACADEMY OF SCIENCES AND ARTS
35, Knez Mihailova, 11000 Belgrade
Serbia and Montenegro

Milutin Milankovic Anniversary Symposium:
PALEOCLIMATE AND THE EARTH CLIMATE SYSTEM
Belgrade, Serbia, 30 August - 2 September 2004

P R O G R A M

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in co-operation:

Ministry of Science and Environmental Protection, Republic of Serbia, Belgrade; Ministry of Culture, Republic of Serbia, Belgrade; University of Belgrade; Faculty of Mathematics, Belgrade; Faculty of Physics, Belgrade; Faculty of Mining and Geology, Belgrade; Faculty of Mechanical Engineering; Astronomical Observatory, Belgrade; Republic of Serbia, Hydrometeorological Service, Belgrade; Geological Survey of Serbia, Belgrade; National Commission of UNESCO, Serbia and Montenegro, Belgrade

Sunday, August 29, 2004**16:00-19:00** Registration (Intercontinental Hotel, Belgrade)**18:30** Ice-breaker party**Monday, August 30, 2004****08:00-18:00** Registration (Intercontinental Hotel, Belgrade)**09:30-11:00** **Symposium opening and keynotes**
(Main Hall of the University of Belgrade; Studentski trg 1; 2nd floor)**Chair:** S. Koicki*Welcome and opening***Marija Bogdanovic** Rector of the University of Belgrade**Nikola Hajdin** President of Serbian Academy of Sciences and Arts**André Berger** Chairman of the International Program Committee**Tetsuya Sato** Director-General, Earth Simulator Center, Japan**Fedor Mesinger** Academician, Member of the International Program Committee**11:00-13:30** **Plenary session: Milutin Milankovic – his astronomical theory and impact of his work** (Main Hall of the University of Belgrade)**S. Koljevic** – *Milutin Milankovic: National stereotypes in international setting – an early European or the last of the Mohicans?***N. Hajdin** – *Structural mechanics – Milankovich's first scientific experience***J. R. Fleming** – *James Croll in context: The encounter between climate dynamics and geology in the second half of the nineteenth century***13:30-15:30** Cocktail (in front of the Main Hall of the University of Belgrade)**19:00** Reception at The White Palace**Tuesday, August 31, 2004****08:00-18:00** Registration (Intercontinental Hotel, Belgrade)**09:00-11:00** **Part 1: The Earth climate dynamics system, and Milutin Milankovic** (Intercontinental Hotel, Atlantic and Pacific Hall)**Chairs:** J.R. Bates and F. Mesinger**T. Sato** – *The Earth simulator changes the paradigm of climate prediction***V. Dymnikov** – *Contemporary problems of the mathematical theory of climate***J.R. Bates** – *Climate stability and sensitivity***11:00-11:20** Coffee break**11:20-12:40** **Part 1: The Earth climate dynamics system, and Milutin Milankovic (continuation)****F. Mesinger** – *Numerical methods in weather and climate modeling: From Milankovic to the present, and beyond*

Part 2: Paleoclimate

A. Berger, M.F. Loutre and J.L. Mélice – *Milankovic and beyond*

12:40-14:00 Lunch

14:00-16:00 Part 2: Paleoclimate (continuation)

Chair: J. Hays

1. Astronomical signals in proxy records

L.A. Hinnov – *Astronomical signals from Pre-Cenozoic eras*

F. Hilgen and L. Lourens – *Sedimentary cyclicality in the Mediterranean Neogene: astronomical climate forcing and geochronometric application*

G. Zhengtang, H. Qingzhen and W. Jianjing – *Comparison of orbital signals recorded in different climate proxies from the Quaternary loess-soil sequences in China*

16:00-16:20 Coffee break

16:20-17:40 Part 2: Paleoclimate (continuation)

H. Hooghiemstra, H. Mommersteeg, M.F. Loutre, E. Baert and A. Berger – *Contribution of the astronomical theory to understanding cyclic and abrupt climatic change at equatorial latitude; the case study of Colombian pollen records*

G. Kukla – *Into a glacial by global warming?*

19:00 Reception at the City Hall given by the Mayor of Belgrade
(Dragoslava Jovanovića str. 2)

Wednesday, September 1, 2004

08:30-18:00 Registration (Intercontinental Hotel, Belgrade)

09:00-11:00 Part 2: Paleoclimate (continuation)

Chair: L. Hinnov

1. Astronomical signals in proxy records

J. Hays – *The Milankovic ice age theory: A review of CLIMAP, SPECMAP and selected more recent findings*

M. Sarnthein, H. Gebhardt, T. Kiefer, H. Erlenkeuser, C. Kissel and F. Schmieder – *95-ky cycles of ocean circulation in the far Northwestern Pacific and South China Sea during the Brunhes Chron*

D. Raynaud – *The Milankovic signature of the paleo-gas record in ice cores*

11:00-11:20 Coffee break

11:20-12:40 Part 2: Paleoclimate (continuation)

2. Data analysis

M. Mudelsee – *Milankovic theory and time series analysis*

3. Modeling the climate response to the astronomical forcing

M. Crucifix and M.F.S. Goñi – *About climate, vegetation and astronomical forcing*

12:40-14:00 Lunch

14:00-16:00 Part 2: Paleoclimate (continuation)

3. Modeling the climate response to the astronomical forcing

Chair: V. Jankovic

M.F. Loutre and **A. Berger** – *Modeling the glacial-interglacial cycles in response to astronomical and CO₂ forcings*

D. Peltier – *Continental ice-sheet inception and demise: The response to Milankovic forcing*

S. Harrison – *The OAGEMs response to the astronomical forcing*

16:00-16:20 Coffee break

16:20-17:00 Part 2: Paleoclimate (continuation)

4. Astronomical theory for other planets:

J. Head – *Recent ice ages and the history of climate change on Mars*

17:00-18:20 Closing Ceremony

20:00 Symposium Dinner

(Aero Klub, Uzun Mirkova str. 4, 2nd floor, Belgrade)

Thursday, September 2, 2004

- **Geological-tourist excursion: Belgrade-Fruska Gora-Novi Sad**

Poster Presentation on permanent display on Tuesday, August 31 and Wednesday, September 1, 2004 (Intercontinental Hotel, Pacific Hall)

Barkin Yu.V. – *Dynamics of the Earth shells and variations of paleoclimate*

Barkin Yu.V., **Klige R.K.** and **Kaftan V.I.** – *Cycles of changes of ocean parameters in Phanerozoic*

Carter R.M. – *Detecting Milankovic rhythmicity in continental margin sediments: examples from Wanganui Basin and ODP site 1119, New Zealand*

Gupta S.M. – *Tropical insolation forcing on Indian summer monsoon during the last 10 million years*

Jovanovic M., **Markovic S.B.** and **Gaudenyi T.** – *Milutin Milankovic and Inqua*

Krstić N., **Hope P.** and **Jovanović B.** – *From the Middle Pliocene drought to the extant "Green House"*

Milogradov-Turin J. – *A survey of tributes to Milutin Milankovic*

Núñez S., **del Río R.A.**, **Lange C.B.**, **Hebbeln D.** and **Marchant M.** – *Milankovic forcing of paleoproductivity of Northern Chile during the Middle and Late Pleistocene: a multiproxy approach*

Petrovic A. – *Milankovic – the founder of cosmic climatology*

Petrovic A. – *Planet Milankovic*

Stevanović-Hedrih K. – *Milankovic Milutin and serbian astrodynamic*

Tóth-Makk Á., Unger Z. and Nádor A. – *100 ky and 40 ky Milankovic cycles in the fluvial Pleistocene sequence of the Great Hungarian Plain*

Šarinová K. – *Red sediments – reflection of climatic changes at the Lower Quaternary*

Remarks: Every author is due to announce the terms when he is available to present his poster.

Social Program

- Opening Ceremony and Welcome Reception
Monday, August 30, 2004, Opening Ceremony at 09:30; Cocktail at 14:00
(Main Hall of the University of Belgrade, Studentski trg 1; 2nd floor)
- Reception at the White Palace
Monday, August 30, 2004, at 19:00
- Reception at the City Hall given by the Mayor of Belgrade
Tuesday, August 31, 2004, at 19:00
Dragoslava Jovanovica str. 2
- Symposium Dinner
Wednesday, September 1, 2004, at 20:00
(Aero Klub, Uzun Mirkova str. 4, 2nd floor)
- Geological-tourist excursion: Belgrade-Fruska Gora-Novi Sad
A pleasant drive northern from Belgrade towards Fruska Gora Hills (69 km far from Belgrade), a National park, hiding 3 monasteries. Scattered around it, dating from 15-18 century. Tour continues to the picturesque town of Sremski Karlovci (visit to the old High School, Serbian Patriarch Mension, Cathedral Church and Baroque fountain). Sightseeing tour of historical landmarks of Petrovaradin Fortress and Novi Sad, Reception at the University of Novi Sad.
Date: Thursday, September 2, 2004
Departure from hotels between 8:30-9:00
Duration 10 hours

Sponsors:



Republic of Serbia, Ministry of Science and Environmental Protection, Belgrade



UNESCO, Regional Bureau for Science in Europe (ROSTE), Venice



Srbijasume

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