

Programme of the gravimetrical workshop

"Bouguer anomaly - what kind of puzzle it is?"

Bratislava, Comenius University, Faculty of Natural Sciences,
Mlynská dol., room CPS+ (B1-322), 11 - 12th September 2014

Thursday, 11th September

9.00 - 10.00: registration

10.00 - 10.15: Welcome and introduction to the workshop (*Bielik, Pašteka*)

10.15 - 10.50: Some remarks on the history of the Bouguer anomaly

(*Mikuška et al.*)

10.50 - 11.20: The physical meaning of the Bouguer anomaly (*Meurers*)

11.20 - 11.30: discussion/break

11.30 - 11.55: Bouguer correction – an old-fashioned concept in the age
of satellite gravity? (*Ebbing*)

11.55 - 12.15: Normal Earth gravity field vs. gravity effect of ellipsoidal model
(*Karcol et al.*)

12.15 - 12.30: discussions

12.30 - 14.00: lunch break (not covered by the conference costs)

14.00 - 14.30: Bouguer anomaly and some distant or global effects
(*Mikuška et al.*)

14.30 - 14.50: Belated remarks on the important paper „Estimation of distant
relief effect in gravimetry” by J.Mikuška, R.Pašteka and I.Marušiak (*Švancara*)

14.50 - 15.25: Modelling with Bouguer anomalies: correct application of
observation heights, trend separation and filtering (*Smilde et al.*)

15.25 - 15.40: discussion/break

15.40 - 16.05: New perspectives for Bouguer field interpretation using a global
spherical harmonic topographic correction (*Braitenberg et al.*)

16.05 - 16.30: Computation of global topographic and stripping corrections in spectral form (*Vajda et al.*)

16.30 - 16.50: Interpretation of gravity: case studies from Central Europe and Western Carpathians (*Bielik et al.*)

16.50 - 17.15: Bouguer anomaly in microgravity survey focused on building effects calculation (*Pánisová et al.*)

17.15 - 17.30: discussions

18.00 - 21.00: dinner, wine and beer (place: workshop room and foyer)

Friday, 12th September

10.00 - 10.20: Numerical calculation of terrain correction within the Bouguer anomaly evaluation (program Toposk) (*Zahorec et al.*)

10.20 - 10.40: Generalization techniques to reduce the number of volume elements in terrain effect modeling (*Benedek et al.*)

10.40 - 11.00: The effect of the differences between terrain and surface models on gravity field related quantities (a case study for Hungary) (*Szücs et al.*)

11.00 - 11.20: discussion/break

11.20 - 11.45: Adaptive calculation of topographical effect with tesseroids and polyhedra (*Szwillus, Holzrichter*)

11.45 - 12.10: Utilization of Bouguer anomalies in determination of heights in geodesy (*Ruess*)

12.10 - 12.30: A new compilation of Bouguer anomalies in Germany – a brief summary of experiences and results (*Gabriel, Skiba*)

12.30 - 12.50: discussions

12.50 - 14.00: lunch break (not covered by the conference costs)

14.00 - 14.25: Regional and detailed gravimetric database of the Slovak Republic (*Pašteka et al.*)

14.25 - 14.50: On the importance of free air anomalies in geodynamics: Carpathian case story (*Tomek*)

14.50 - 15.20: On capabilities of gravimetric methods in studying magmatic systems (*Vajda et al.*)

15.20 - 15.45: Geometric analysis of a digital field of Bouguer anomalies (*Hronček, Ihring*)

15.45 - 16.10: discussions

16.10 - 16.30: final discussions, information about the prepared publication, closing of the workshop

18.00 - 24.00: dinner, social event (place: Bastion Koliba Restaurant)

Important comment: All timings are given approximately and we can adapt the schedule upon our discussions. Also the order of them can be changed.

Further information:

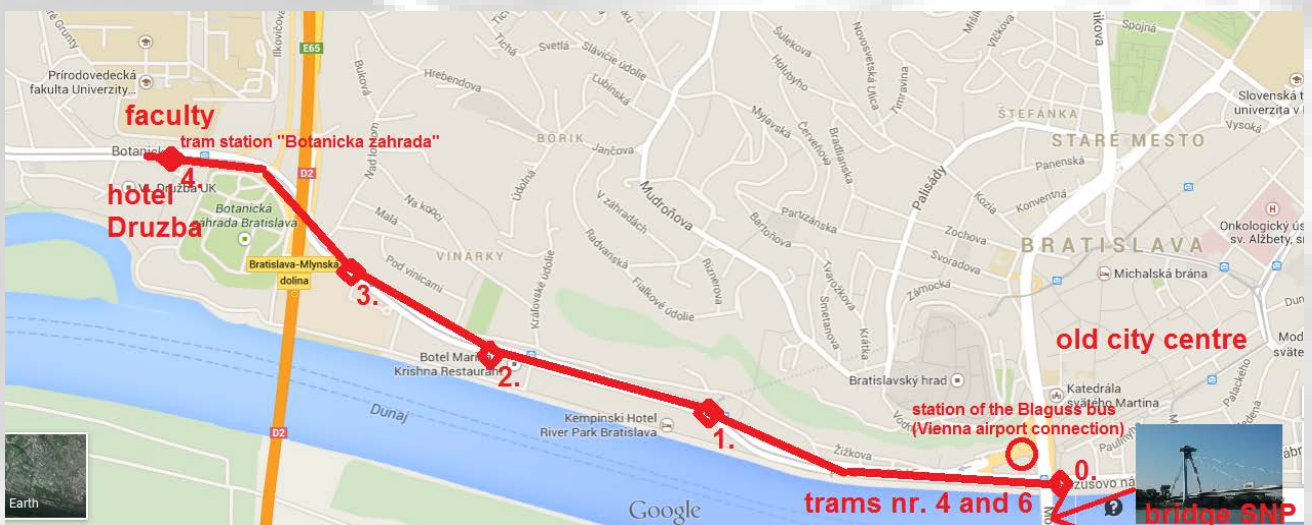
1. transport

Bratislava has a quite good connection with Vienna airport (Schwechat) – a good solution is to take the bus from the company Blaguss:

<http://www.blaguss.sk/pages/en/timetables.php?lang=EN>

(in Bratislava the station “Most SNP” is the closest stop to the faculty).

This bus is also connecting the Bratislava centre with Bratislava Airport.



From the station “most SNP” you have to take trams nr. 4 or 6 and travel fours stops (to the station “Botanicka zahrada”).

Details about “how to get to the faculty” from the tram station will be given later on.

When you would like to use Taxi, give to the driver the following addresses:

a) Faculty:

Prirodovedecká fakulta UK, Mlynska dolina

(and the Taxi should bring you to the main entrance of the faculty)

b) Hotel Družba (close to the faculty):

Hotel Družba, Botanická ul.

When you plan to arrive to the main railway station or railway station „Petrzalka“ (or on a different way), let us know and we will explain to you the transportation.

2. accommodation

Bratislava has various good hotels and apartments in the centre, connection from the centre to our faculty is well covered by public transportation – by trams nr. 4, 5, 6 and 9. The only problem is that this kind of accommodation can be a little bit more expensive.

We recommend Hotel Družba:

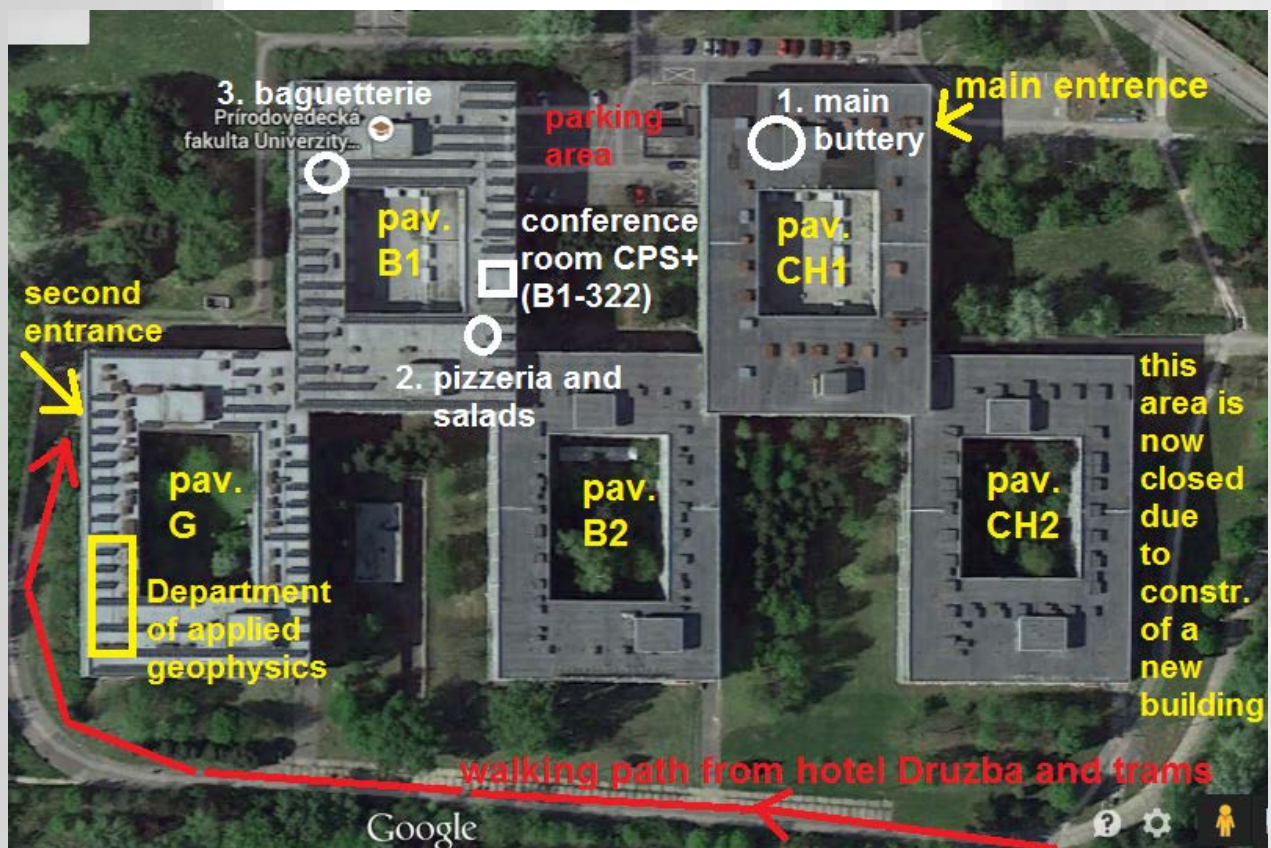
<http://www.hoteldruzba.sk/en/home/>

which is close to our faculty (only some 5-8 minutes by walking) and the prices are from our point of view acceptable (around 30 Eur/night). You can make reservation on the e-mail address: repcia@druzba.uniba.sk

(there is some actual news from the hotel, we have got few days ago – they can offer now only double bed rooms, but for a price of a single bed room).

Path-way from the hotel Družba (and the tram station “Botanická zahrada”) to our faculty is displayed in the next following figure in red colour (there is

given also the information about the catering possibilities for the lunch-time in the frame of the faculty building).



The way to the main entrance is now blocked by a building area in the eastern part of the faculty area (right-hand part of the figure), so the second entrance in the pavilion G should be used. In the case that you will use a Taxi, you will probably use the main entrance. The way inside the building to the conference room CPS+ (B1-322) will be signed by arrows with the logo of the workshop.

3. catering

During the lunch-time the catering will be not covered by the conference costs (from our local sponsors), only the evening social events. For a lunch, there are several possibilities directly inside of the faculty building (displayed in the previous figure), but some of them can be for somebody too simple or close to a fast-food service. Therefore we give here a next figure with restaurants in the surroundings of the faculty:



It is important to mention the **Bastion Koliba Restaurant** – where the final social event on Friday evening will take place. It is some 5-10 minutes by walking from the faculty – taking the main entrance and then approximately direction to the north. The restaurant will be open for us on Friday until midnight and we hope that we can continue our intensive scientific and social discussions there. Thanks to our sponsors (Geoproxima Ltd., G-trend Ltd. And Geotronix Ltd.) we have an reserved budget there. After reaching the top of this budget (this information will be loudly given to everybody), every guest will be asked to pay for his/her own charges.

We hope that these information can be helpful for you and will make the stay in Bratislava more comfortable.

If there are some things, that we have forgotten, please contact us via e-mail address: pasteka@fns.uniba.sk

We are wishing a good travel to you and looking forward to meet you in Bratislava!

On the behalf of the organising committee

Roman Pašteka