

PROBASTAT 2011

the Sixth International Conference on Probability and Statistics

Smolenice Castle, Slovakia,

July 4 to July 8, 2011

Contact Information

PROBASTAT 2011
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Transportation

[Bratislava](#) (the capital city of [Slovakia](#)) is easily accessible by train, bus, or plane - with arrivals to [Airport Bratislava \(BTS\)](#), or to [Vienna International Airport \(VIE\)](#), which is about 50 km from Bratislava. There is a direct bus connection from VIE to Bratislava.

Position of the Smolenice Castle:

- LATITUDE: 48° 30' 50.05" N
- LONGITUDE: 17° 25' 58.10" E
- ELEVATION: 293 m

Conference Bus to Smolenice

The conference bus from Bratislava to Smolenice Castle will depart on Monday, July 4, 2011, from the following stops in Bratislava:

- Park Inn Hotel Danube (city center), at 9:30 (AM)
- Hotel Matyšák, at 9:45 (AM)
- Main Railway Station at 10:00 (AM)

The journey takes about 90 minutes. The organizers urge participants to take this bus.

Individual transportation to Smolenice is available by regional buses from the Bus Station Mlynske Nivy.

For transfer from Bratislava Airport to the Bus Station we suggest to use either Taxi or the public transportation.

The conference bus from Smolenice Castle to Bratislava will depart on Friday, July 8, 2011, shortly after the lunch, approximately at 13:00. The bus will stop at the Bratislava Airport, the Bus Station, and the city center.

However, [public transportation](#) to Smolenice is also available from the Bratislava Bus Station (Mlynske Nivy), see the attached schedule of the buses.

Scientific Program

PROBASTAT 2011 will include invited and contributed talks and posters in the following research areas:

- Regression and Mixed Models;
- Optimum Experimental Design;
- Random Processes;
- Innovative Statistical Practices.

Information for Presenters

Oral Presentations

- Oral presentations will take place in the lecture room at the first floor of the Castle.
- The pre-planned time is 40 minutes for an invited lecture and 20 minutes for a contributed presentation (including discussion).
- We recommend to prepare the presentations for an electronic presentation either as an Adobe Acrobat file or as a Microsoft Power Point presentation.
- Presenting authors should upload the files (available on CD or USB flash drive) at least 30 minutes before the beginning of the Session.
- Usage of your own computer for presentation is not possible.

Poster Presentations

- Posters will be displayed at the lobby in the second floor, near the lecture room.
- The maximum allowable size of the Posters is 120 x 80 cm (length x width).
- The posters will be displayed from Monday till Thursday.

Scientific Program

			Monday, July 4, 2011	Title
12:00			Arrival - registration	
13:00			Lunch	
14:00	14:20		Opening	
Session:			<i>Regression and Mixed Models I</i>	
Chair:			<i>Júlia Volaufová</i>	
14:20	15:00		Dietrich von Rosen	<i>Explicit estimators in unbalanced mixed linear models</i>
15:00	15:20		Eva Fišerová	<i>One kind of reduction of multivariate statistical models</i>
15:20	15:40		Andrzej Michalski	<i>Using information matrix for evaluation of the effectiveness in parameter estimation for different statistical models</i>
15:40	16:00		Hilmar Drygas	<i>Regression models and the coordinate-free approach</i>
16:00	16:20		Coffee Break	
Session:			<i>Random Processes I</i>	
Chair:			<i>Sergej Leonov</i>	
16:20	17:00		Stephen Kirkland	<i>Markov Chains with a specified directed graph</i>
17:00	17:20		Jeff Hunter	<i>Markov Chain properties in terms of column sums of the transition matrix</i>
17:20	17:40		Ali Reza Taheriyoun	<i>A frequency domain approach in testing of covariance function of stationary Gaussian random fields</i>
18:00			Welcome Party	
19:00			Dinner	
20:00	22:00		Poster Session I	
			Lenka Filová	<i>Criterion-robust designs for the model of spring balance weighing with a constant bias</i>
			Martina Hančová	<i>Empirical predictors in finite discrete spectrum linear regression models</i>
			Daniel Hlubinka	<i>Data depth in classification</i>
			Klára Hornišová	<i>Properties of data depth calibration set</i>
			Yufen Huang	<i>An approach to construction of response surface designs with qualitative and quantitative factors</i>
			Martina Chvosteková	<i>A comparison of the simultaneous two-sided tolerance intervals for a linear regression model</i>
			Pavel Kříž	<i>Probability limit identification functions on separable metrizable spaces</i>
			Michaela Tučková	<i>Design of experiment for sigmoidal function: Measurement of hysteresis loops</i>
			Enes Özel	<i>The distribution of fractional domination number of a random digraph family based on one-dimensional uniform data</i>

Scientific Program

			Tuesday, July 5, 2011	Title
Session:			<i>Optimum Experimental Design I</i>	
Chair:			<i>Rosemary Bailey</i>	
9:00	9:40		Alessandra Giovagnoli	<i>Adaptive designs for inference and ethics</i>
9:40	10:00		Anthony Atkinson	<i>Carbon dating of the shroud of Turin: Partially labeled regressors and the design of experiments</i>
10:00	10:20		Vladimir Lacko	<i>Planning of experiments for a nonautonomous Ornstein-Uhlenbeck process</i>
10:20	10:40		Coffee Break	
Session:			<i>Innovative Statistical Practices I</i>	
Chair:			<i>James Ramsay</i>	
10:40	11:20		Eric Moulines	<i>Adaptive and interacting Markov chain Monte Carlo methods</i>
11:20	11:40		Gennadij Ososkov	<i>Novel approaches of data-mining in experimental physics</i>
11:40	12:00		Jorge Achcar	<i>Bivariate Weibull distributions derived from copula functions in the presence of cure fraction and censored data</i>
12:00	14:00		Lunch Break	
Session:			<i>Regression and Mixed Models II</i>	
Chair:			<i>Dietrich von Rosen</i>	
14:00	14:40		Simo Puntanen	<i>Equalities of the BLUEs and/or BLUPs in two linear models</i>
14:40	15:00		Karel Hron	<i>Linear regression with compositional explanatory variables using logratio approach</i>
15:00	15:20		Hiroto Hyakutake	<i>Pairwise comparisons for parallel profile models with mixed effects</i>
15:20	15:40		Coffee Break	
Session:			<i>Optimum Experimental Design II</i>	
Chair:			<i>Alessandra Giovagnoli</i>	
15:40	16:20		Sergei Leonov	<i>Optimal design for nonlinear mixed effects models: optimization of sampling schemes for population pharmacokinetic/pharmacodynamic studies</i>
16:20	16:40		Guillaome Sagnol	<i>Network-related problems in optimal experimental design and second order cone programming</i>
16:40	17:00		Barbara Bogacka	<i>Optimum design of experiments for enzyme inhibition kinetic models</i>
17:00	17:20		Coffee Break	
Session:			<i>Innovative Statistical Practices II</i>	
Chair:			<i>Michal Kulich</i>	
17:20	17:40		Petr Lachout	<i>L₂ consistency</i>
17:40	18:00		Dimitrios Nikolakis	<i>An analysis of the survival times of the patients with acute myeloid leukemia by using a changing form of the hazard function</i>
18:00	18:20		Hyung-Tae Ha	<i>Saddlepoint vs. polynomially adjusted approximation for various compound distributions</i>
19:00			Dinner	
20:00			Chamber Concert	

Scientific Program

			Wednesday, July 6, 2011	Title
Session:			<i>Optimum Experimental Design III</i>	
Chair:			<i>Eric Moulines</i>	
9:00	9:40		Rosemary Bailey	<i>Optimal design of experiments with very low replication</i>
9:40	10:00		Zdeněk Hlávka	<i>Optimal designs for nonparametric estimation of zeros of regression functions</i>
10:00	10:20		Michal Černý	<i>On computational complexity of construction of c-optimal linear regression models over finite experimental domains</i>
10:20	10:40		Coffee Break	
Session:			<i>Random Processes II</i>	
Chair:			<i>Stephen Kirkland</i>	
10:40	11:20		Marcus Reiß	<i>Volatility estimation from noisy observations and Le Cam theory</i>
11:20	11:40		Marie Hušková	<i>Sequential monitoring in autoregression</i>
11:40	12:00		Zuzana Prášková	<i>On estimations in a multivariate RCA(1) model</i>
12:00	13:30		Lunch Break	
13:30	19:00		Excursion	
19:00			Dinner	
20:00	22:00		Poster Session II	
			Jaiwook Baik	<i>Prediction of future field failures based on claim data</i>
			Katarína Bartošová	<i>Classification of breath gas compounds for detection of severe diseases</i>
			Yu-Jung Huang	<i>Security analysis of RFID mutual authentication protocol</i>
			Dimitrios Nikolakis	<i>A case statistical study for risk factors relationship to epilepsy</i>
			Rastislav Rusnačko	<i>The comparison of estimators of variance parameters in the growth curve model</i>
			Martin Rybár	<i>Fréchet classes of copulas</i>
			František Štulajter	<i>Best linear unbiased predictors in spectrally orthogonal FDSLRLMs</i>
			Geza Wimmer	<i>Partial-sums distributions from a new point of view</i>
			Viktor Witkovský	<i>On some exact simultaneous likelihood-based confidence regions for two variance components</i>

Scientific Program

			Thursday, July 7, 2011	Title
Session:			Regression and Mixed Models III	
Chair:			Anthony Atkinson	
9:00	9:40		Silvelyn Zwanzig	<i>On R-estimators in errors-in-variables models</i>
9:40	10:00		Lynn LaMotte	<i>Estimability and restrictions in linear models</i>
10:00	10:20		Kateřina Myřková	<i>One-dimensional replicated calibration model with quadratic calibration function</i>
10:20	10:40		Coffee Break	
Session:			Innovative Statistical Practices III	
Chair:			Simo Puntanen	
10:40	11:20		Michal Kulich	<i>Estimating incidence from cross-sectional biomarker data</i>
11:20	11:40		Ivan Mizera	<i>Statistics for experimenters in R</i>
11:40	12:00		Milan Stehlík	<i>On favorable inference for heavy tailed data</i>
12:00	14:00		Lunch Break	
Session:			Random Processes III	
Chair:			Jeff Hunter	
14:00	14:40		Frank Ball	<i>Epidemics on random networks with household structure</i>
14:40	15:00		Katarína Janková	<i>Chaos and stability for discrete random dynamical systems</i>
15:00	15:20		Mei-Hui Guo	<i>Parameter estimation of time series models based on rounded data</i>
15:20	15:40		Coffee Break	
Session:			Innovative Statistical Practices IV	
Chair:			Frank Ball	
15:40	16:20		James Ramsay	<i>A compact functional estimate of a functional variance-covariance or correlation kernel</i>
16:20	16:40		Stanislav Katina	<i>Generalized shape space PCA, symmetric two-block PLS, and LDA with respect to bending energy</i>
16:40	17:00		Radoslav Harman	<i>A conditional distribution approach to uniform sampling on spheres and balls in L_p spaces</i>
17:00	17:20		Mona Shokripour	<i>Robustness of quantile regression for stable data</i>
17:20	17:40		Coffee Break	
Session:			Regression and Mixed Models IV	
Chair:			Silvelyn Zwanzig	
17:40	18:00		Júlia Volaufová	<i>Testing hypotheses in linear models with two variance-covariance components</i>
18:00	18:20		František Rublík	<i>On testing parallelism of regression lines</i>
20:00			Conference Dinner	

Scientific Program

			Friday, July 8, 2011	Title
Session:			<i>Regression and Mixed Models V & Optimum Design IV</i>	
Chair:			<i>Lynn LaMotte</i>	
9:30	10:10		Panos Vassiliou	
10:10	10:30		Ján Somorčík	<i>Asymptotics of the spatial median for clustered data</i>
10:30	10:50		Barbora Arendacká	<i>Generalized fiducial pivots in random effects models</i>
10:50	11:10		Andrej Pázman	<i>Comparative expressions for design in models with constraints</i>
11:10	11:20		Closing	
11:30			Lunch	
12:30			Departure to Bratislava	

Bratislava » Smolenice

from 4.7.2011 Po 10:00

Date	From/Interchange/To	Arr.	Dep.	Note	Connections
4.7.	Bratislava,,AS MHD Smolenice,,OcÚ	11:21	10:10 >	41	Bus 303410 8 ✕ ⑥
Overall time 1 hours 11 min. , distance 54 km , price 2,50 EUR ① SAD Trenčín a.s.; Myjava; 034/621 2257 ② runs on ✕,«Sa»					
4.7.	Bratislava,,AS MHD Trnava,,AS MHD 14 Smolenice,,OcÚ	12:10 13:22	11:20 12:20 >	26 17	Bus 707506 10 ✕ ⑥ R Bus 207419 35 ✕
Overall time 2 hours 2 min. , distance 82 km , price 4,65 EUR ① SAD Zvolen a.s.; Modrý Kameň; 047/487 0042 (Bus 707506) SAD Trnava a.s.; Trnava; 0900 211 911 (Bus 207419) ② runs on ✕,runs not 28 X.					
4.7.	Bratislava,,AS MHD Dolný Smolenice,,OcÚ	12:49 13:41	11:25 13:25 >	42	Bus 102423 35 ✕ Bus 102425 15 ✕
Overall time 2 hours 16 min. , distance 56 km ① Slovak Lines, a.s.; Bratislava; 18211 ② runs on ✕					
4.7.	Bratislava,,AS MHD Trnava,,AS MHD 14 Dolné Orešany Smolenice,,OcÚ	12:45 13:25 13:41	12:00 13:00 >	22 17	Bus 506504 2 ✕ Bus 207419 37 ✕ ⑥ Bus 102425 15 ✕
Overall time 1 hours 41 min. , distance 76 km ① MT - LINES, a. s.; Martin; 0911 790 355 (Bus 506504) SAD Trnava a.s.; Trnava; 0900 211 911 (Bus 207419) Slovak Lines, a.s.; Bratislava; 18211 (Bus 102425) ② runs on ✕					
4.7.	Bratislava,,AS MHD Smolenice,,OcÚ	13:52	12:40 >	41	Bus 303410 12 ✕ ⑥
Overall time 1 hours 12 min. , distance 54 km , price 2,50 EUR ① SAD Trenčín a.s.; Myjava; 034/621 2257 ② runs on ✕,«Sa»					
4.7.	Bratislava,,AS MHD Smolenice,,OcÚ	14:34	13:00 >	45	Bus 102425 13 ✕ ⑥
Overall time 1 hours 34 min. , distance 56 km ① Slovak Lines, a.s.; Bratislava; 18211 ② runs on ✕,«Sa»					
4.7.	Bratislava,,AS MHD Trnava,,AS MHD 14 Smolenice,,OcÚ	14:34 15:25	13:45 14:45 >	24 16	Bus 301502 16 ✕ † Bus 207427 6 ✕
Overall time 1 hours 40 min. , distance 77 km ① SAD Prievidza a.s.; Bánovce n.Bebravou; 038/760 2836 (Bus 301502) SAD Trnava a.s.; Trnava; 0900 211 911 (Bus 207427) ② runs from 1 VII. till 31 VIII. on ✕					
4.7.	Bratislava,,AS MHD Smolenice,,OcÚ	16:06	14:40 >	43	Bus 207405 4 ✕
Overall time 1 hours 26 min. , distance 56 km , price 2,95 EUR ① SAD Trnava a.s.; Trnava; 0900 211 911 ② runs on ✕					
4.7.	Bratislava,,AS MHD Smolenice,,OcÚ	17:00	15:25 >	45	Bus 102425 21 ✕

Bratislava » Smolenice

from 4.7.2011 Po 10:00

Overall time **1 hours 35 min.**, distance **56 km**

📍 Slovak Lines, a.s.; Bratislava; 18211

🕒 runs on ✕

Date	From/Interchange/To	Arr.	Dep.	Note	Connections
4.7.	Bratislava,,AS MHD Smolenice,,OcÚ	17:03	15:50 >	43	Bus 205423 2 ✕

Overall time **1 hours 13 min.**, distance **54 km**, price **2,75 EUR**

📍 SAD Trnava a.s.; Trnava; 0900 211 911

🕒 runs on ✕

Date	From/Interchange/To	Arr.	Dep.	Note	Connections
4.7.	Bratislava,,AS MHD Smolenice,,OcÚ	17:32	16:20 >	46	Bus 303410 14

Overall time **1 hours 12 min.**, distance **54 km**, price **2,50 EUR**

📍 SAD Trenčín a.s.; Myjava; 034/621 2257

Date	From/Interchange/To	Arr.	Dep.	Note	Connections
4.7.	Bratislava,,AS MHD Smolenice,,OcÚ	18:35	17:05 >	45	Bus 102425 23 ✕

Overall time **1 hours 30 min.**, distance **58 km**

📍 Slovak Lines, a.s.; Bratislava; 18211

🕒 runs on ✕

Date	From/Interchange/To	Arr.	Dep.	Note	Connections
4.7.	Bratislava,,AS MHD Trnava,,AS MHD 🚗 Smolenice,,OcÚ	19:29	17:30 18:20 18:35 >	15 17	Bus 102509 29 ✕ Bus 207419 65

Overall time **1 hours 59 min.**, distance **82 km**

📍 Slovak Lines Express, a.s.; Bratislava; 18211 (Bus 102509)
SAD Trnava a.s.; Trnava; 0900 211 911 (Bus 207419)

🕒 runs on ✕

Date	From/Interchange/To	Arr.	Dep.	Note	Connections
4.7.	Bratislava,,AS MHD Smolenice,,OcÚ	19:57	18:30 >	45	Bus 102425 27 ✕

Overall time **1 hours 27 min.**, distance **56 km**

📍 Slovak Lines, a.s.; Bratislava; 18211

🕒 runs on ✕

Date	From/Interchange/To	Arr.	Dep.	Note	Connections
4.7.	Bratislava,,AS MHD Smolenice,,OcÚ	20:25	19:15 >	43	Bus 303410 18 ✕ Ⓞ

Overall time **1 hours 10 min.**, distance **54 km**, price **2,50 EUR**

📍 SAD Trenčín a.s.; Myjava; 034/621 2257

🕒 runs on ✕,«Sa»

Date	From/Interchange/To	Arr.	Dep.	Note	Connections
4.7.	Bratislava,,AS MHD Trnava,,Zelený kričok Smolenice,,OcÚ	23:38	21:40 22:56 22:58 >	45	Bus 207416 42 Bus 207419 69 ✕

Overall time **1 hours 58 min.**, distance **79 km**, price **4,10 EUR**

📍 SAD Trnava a.s.; Trnava; 0900 211 911

🕒 runs on ✕

Date	From/Interchange/To	Arr.	Dep.	Note	Connections
5.7.	Bratislava,,AS MHD Košolná,,obec Smolenice,,OcÚ	7:42	5:20 6:57 7:14 >	42	Bus 102423 111 † Bus 207419 25 †

Overall time **2 hours 22 min.**, distance **67 km**

📍 Slovak Lines, a.s.; Bratislava; 18211 (Bus 102423)
SAD Trnava a.s.; Trnava; 0900 211 911 (Bus 207419)

🕒 runs on †

Date	From/Interchange/To	Arr.	Dep.	Note	Connections
5.7.	Bratislava,,AS MHD Trnava,,AS MHD 🚗	8:00	7:05 8:15	21 17	Bus 505503 2 R Bus 207419 27

Bratislava » Smolenice

from 4.7.2011 Po 10:00

Smolenice,,OcÚ

9:14 >

Overall time **2 hours 9 min.**, distance **82 km**

📍 SAD Trnava a.s.; Trnava; 0900 211 911

Sings and symbols

† - Sundays and holidays confirmed by state © - Saturday MHD - transfer to city transport possible R - seat reservation available
🚆 - transfer to train possible ✂ - Working day