Mendel University in Brno

RESEARCH TEAM PROFILES

FACULTY

Faculty of Business and Economics

RESEARCH AREA

Bioeconomic Modelling, Econometrics, Biometrics

RESEARCH TEAM

Assoc. Prof. Jitka Janová, PhD., team leader, contact: janova@mendelu.cz, tel.: +420 545 132 400

David Hampel, PhD., Mendel University in Brno, Czech Republic
Luboš Střelec, PhD., Mendel University in Brno, Czech Republic
Assoc. Prof. Václav Adamec, PhD., Mendel University in Brno, Czech Republic

EXPERT/TECHNICAL PROFILE OF THE TEAM (SPECIFIC PART OF RESEARCH)

Agriculture and forest management models, Validation and verification of decision support systems, Planning and evaluating of experiments (field trials, laboratory, animal, engineering).

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EXPERIENCE

Participation in national projects (programme and provider)

- The Czech Science Foundation, grant No. 13-25897S, Non-holonomic constraints in optimal managing of dynamic economic systems in agriculture and natural resources, 2013–2015
- The Czech Science Foundation, grant No. 15-24867S. Small and medium size enterprises in global competition: Development of specific transfer pricing methodology reflecting their specificities, 2015–2017
- The Technology Agency of the Czech Republic, grant No. TD010128, Decision making support system for the plant varieties agricultural policy in the Czech Republic, 2012–2013
- The Technology Agency of the Czech Republic, grant No. TD020346, Decision making support system for the plant varieties agricultural policy in Czech Republic II, 2014–2015

Conference organization etc. (national and international)

- XIX. Summer school of biometrics; 2010, Lednice, Czech Republic
- 11th International Conference of Numerical Analysis and Applied Mathematics, session Mathematical modelling of economic systems; 2013, Rhodes, Greece
- 7th Workshop on Statistics, Mathematics and Computation, session Statistical methods in business and economics; 2013, Tomar, Portugal
- XX. Summer school of biometrics; 2014, Slavonice, Czech Republic
- XXIV. Problems of decision making under uncertainties; 2014, Český Rudolec, Czech Republic
- 12th International Conference of Numerical Analysis and Applied Mathematics, session Mathematical modelling of economic systems II; 2014, Rhodes, Greece

Involvement in cross-border / regional and bilateral cooperation

- AKTION Czech Republic – Austria (JKU Linz)

Involvement in European (especially in Framework Programmes projects, EUREKA, EUROSTARS, COST etc.) and international cooperation

- HORIZON – EURO1- Societal Challenges – FairTax Consortium – 2015–2018 under the leadership of UMEA University

Membership in international bodies

- Institute for Systems and Technologies of Information Control and Communication
- Czech Operations Research Society
- Czech Academy of Agricultural Sciences
- Polish Biometrics Society

Selected publications

- Stehlík, M., Střelec, L., Thulin, M. On robust testing for normality in chemometrics. Chemometrics and Intelligent Laboratory Systems. 2014. Vol. 130, No. 1, pp. 98–108. ISSN 0169-7439
- Janová, J., Crop plan optimization under risk on a farm level in the Czech Republic. Agricultural Economics, 2014. Vol. 60, No. 3, pp. 123–132. ISSN 0139-570X
- Janová, J., Crop Planning Optimization Model: the Validation and Verification Processes. Central European Journal of Operations Research. 2012. Vol. 20, No. 3, p. 451–462. ISSN 1435-246X
- Vidmar, G., Blagus, R., Střelec, L., Stehlík, M. Business indicators of healthcare quality: Outlier detection in small samples. Applied Stochastic Models in Business and Industry. 2012. Vol. 28, No. 3, pp. 282–295. ISSN 1524-1904
- Stehlík, M., Fabián, Z., Střelec, L. Small Sample Robust Testing for Normality against Pareto Tails. Communications in Statistics – Simulation and Computation. 2012. Vol. 41, No. 7, pp. 1167–1194. ISSN 0361-0918
- Smýkalová, I., Hampel, D., Pavelek, M. Determination of duplicates of accessions in a germplasm collection of flax/linseed by means of digital image analysis. Industrial Crops and Products. 2012. Vol. 36, No. 1, pp. 177–187. ISSN 0926-6690
- Janová, J. Applications of a constrained mechanics methodology in economics. European Journal of Physics. 2011. Vol. 32, No. 6, pp. 1443–1463. ISSN 0143-0807
- Malý, S., Královec, J., Hampel, D. Effects of long-term mineral fertilization on microbial biomass, microbial activity, and the presence of r- and K-strategists in soil. Biology and Fertility of Soils. 2009. Vol. 45, No. 7, pp. 753–760. ISSN 0178-2762
- Hampel, D. Lánský, P. On the estimation of refractory period. Journal of Neuroscience Methods. 2008. Vol. 171, No. 2, pp. 288–295. ISSN 0165-0270
- Adamec, V., Cassell, B. G., Smith, E., Pearson, R. Effects of inbreeding in the dam on dystocia and stillbirths in US Holsteins. Journal of Dairy Science. 2006. Vol.. 89, No. 1, pp. 307–314. ISSN 0022-0302

Topics for cooperation in H2020/project proposal

- H2020-ISIB-2014-2015 Innovative, Sustainable and Inclusive Bioeconomy

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