#### Martina Fojtíková

#### **PROMOTION OF CERVICAL CANCER SCREENING**

#### Introduction

Organized cervical cancer screening has proved to be an effective tool of preventive healthcare. The main reason is that regular preventive examinations enable the detection of disease in its early stage when its curability is high. Moreover, a specific development of the illness provides the opportunity to diagnose precancerous lesions, in other words, altered cells can be indicated and treated before their progression to invasive disease. Systematic screening, therefore, has the apparent result of a decrease in incidence and mortality of cervical cancer.

The American Cancer Society states that the number of deaths caused by cervical cancer declined by 74% between 1955 and 1992. The main reason for this change was adoption of Papanicolaou's cervical smear (Pap smear) test and its use in population screening.<sup>1</sup> Also most European countries registered significant decrease in cervical cancer mortality after the implementation of organized screening. According to the age range of the target population and the proportion of screening coverage, mortality decreased by 10 to 80%.<sup>2</sup>

Even though cervical cancer mortality is highly preventable<sup>3</sup> and screening programs were widely introduced, incidence and mortality could still be lower. Age adjusted incidence and mortality for cervical carcinoma was as high as 8,1 and 2,4, respectively, in the USA in 2004. Age-standardized incidence within European Union countries ranges from 4,7 in Finland to 18,6 in Slovenia.<sup>4</sup> Standardized average incidence and mortality rates was 10,7 and 3,5 respectively in EU states.<sup>4</sup>

In the Czech Republic the screening program has been established by law. Preventive gynaecological examinations are not compulsory, but they are fully covered by public health insurance for all women from 15 years of age (with no upper limitation) every 12 months. The preventive examination comprises Pap smears and colposcopy.<sup>5</sup> Despite the presence of the screening program, there is significant number of women who do not follow the recommendations and do not have their Pap smear tests taken longer than 5 years. Moreover, the Czech Republic still has quite high incidence and mortality in comparison with other European countries. It reached up to 18,0 and 5,8, respectively, in 2004.<sup>6</sup>

The text is a part of an introduction to an article with structure: introduction, methods, results and discussion. Citation style: AMA.

#### Author: Zuzana Rakovska

Source of the text: Statement of Motivation and Research Description Essay written for doctoral audition (I am in the 1st year of doctoral studies).

Context of the text: Expected Methodology part

#### Expected Methodology

In order to conduct comprehensive analysis of the topic I would require a solid set of observations capturing investors' decision-making. Available literature on the issue offers two possible directions. The first one considers a study of market data including prices, stock returns, volatility, or other financial indicators that indirectly reflect investors' behaviors1. Taking the study of home bias as an example, the technique can be found in French & Poterba (1991) who use expected returns in their study of incomplete international diversification. Alternatively, Barberis et al. (2001) employ NYSE stock prices in order to prove evidence from historical data favoring the hypothesis arising from prospect theory. Although, this direction offers solid literature background, it is possible that the financial data from the Czech environment would not be available, or would not be sufficient. This risk cannot be assessed before the actual study of the datasets initiates.

The second possible direction of research methodology is the experimental one. Such an approach applies real observations on a group of human subjects that are faced with various settings under which they are forced to make decisions. A group of finance students might be considered for an example. Camerer & Lovallo (1999) used the experimental approach in studying overconfidence of investors. Likewise Kahneman et al. (1991) used it in their study of endowment effect, and status quo bias. It is important to state that the approach relies heavily on correct selection of experimental groups, which might not be available by the time the study starts.

To sum up, both proposed variants of methodology offer interesting possibilities of academic research. However, each of them exhibit shortcomings connected to data availability. Since the second approach bears the risk of not finding the proper experimental group, the first one offers the possibility to use data from other countries in case the Czech data would not be relevant. Therefore, I expect that application of the first variant would be more feasible. Nevertheless, at this point of view, I would like to present both of them as expected, leaving the assumptions on possible drawbacks behind.

1Expected data source is Bloomberg which is available to students studying at the Faculty of Economics and Administration, Masaryk University. References

Barberis, N., M. Huang, & T. Santos (2001): \Prospect Theory and Asset Prices."

Quarterly Journal of Economics 116(1): p. 52.

Camerer, C. & D. Lovallo (1999): \Overconfidence and Excess Entry: An Experimental Approach." The American Economic Review 89(1): pp. 306{318.

French, K. R. & J. M. Poterba (1991): \Investor Diversification and International

Equity Markets." The American Economic Review 81(2): pp. 222{226.

Kahneman, D., J. L. Knetsch, & R. H. Thaler (1991): \Anomalies: The Endowment

E\_ect, Loss Aversion, and Status Quo Bias." Journal of Economic Perspectives 5(1):

pp. 193{206.

#### Veronika Nezhybová

Abstract of a paper called "Metazoan parasites of African annual killifish (Nothobranchiidae): abundance, diversity and their environmental correlates" for biological journal Biotropica

Annual killifish of the genus Nothobranchius inhabit annually desiccating pools across the African savannah and survive the dry period as developmentally arrested embryos. Their discontinuous, nonoverlapping generations make for unique predictions regarding their natural parasite fauna that has not been documented to date. Here, we investigate the relationship between global (climate, altitude) and local (pool size, vegetation, host density and diversity, diversity of potential intermediate hosts) environmental factors and killifish parasite community structure. We examined metazoan parasites from 21 populations of four species of genus Nothobranchius (Nothobranchius orthonotus, N. furzeri, N. kadleci and N. pienaari) across a gradient of aridity in southern and central Mozambigue. Seventeen parasite taxa were recorded in total, with trematode larval stages (metacercariae) being the most abundant taxa in killifish parasite communities. The parasites recorded were both allogenic (i.e. life cycle includes nonaquatic host; predominantly trematodes) and autogenic (i.e. cycling only in aquatic hosts; all nematodes found). Parasite abundance was highest in climatic regions with intermediate aridity, while parasite diversity was associated with local environmental characteristics and positively correlated with fish species diversity. Our results suggest that parasite communities of sympatric species of Nothobranchius fish are similar and dominated by larval stages of generalist parasites. These killifish therefore serve as important intermediate or paratenic hosts of parasites, with piscivorous birds and predatory fish being their most likely definitive hosts.

## Monika Stankova

# Volumetric analysis versus response evaluation criteria in solid tumors and modified response evaluation criteria in solid tumors in the evaluation of HCC after transareterial chemoembolization

**Purpose:** To compare volumetric analysis with the standard criteria - response evaluation criteria in solid tumors (RECIST) and modified response evaluation criteria in solid tumors (mRECIST), for the evaluation of HCC and its response to transarterial chemoembolization (TACE).

**Material and methods:** A total of 40 patients treated in the University Hospital Brno with HCC were included in this study. All of them underwent TACE and their tumor range was evaluated on the CT/MR input and output. Volumetric analysis was performed semiautomatically. The survival of the patients was evaluated since the date of the first chemoembolization. Overall survival was evaluated by the Kaplan-Meier method and the differences in survival by the log-rank test.

**Results:** The strongest correlation has been proven between the length of survival and determination of the viable part of a tumor using volumetric analysis and between the length of survival and the ratio viable/nonviable parts of the tumor. The median of survival since the first performed TACE is 15,0 months. RECIST and mRECIST have not been proven as a statistically significant factor of correlation with the overall survival.

**Conclusion:** Volumetric analysis was statistically proven as the strongest factor of the correlation with the length of survival of patients, contrary to RECIST and mRECIST. It is a convenient way to evaluate the response of HCC to treatment, particularly in complex tumors after TACE.

This abstract was written for an international congress of The European Society of Gastrointestinal and Abdominal Radiology (ESGAR). The research will be presented in 12 minutes in a Power-Point presentation.

# Barbora Pijáková

The text below will (hopefully) belong to my next manuscript concerned with two possible freezing mechanisms of small water droplets on the top of surfaces with different wetting properties. The aim of the work is to highlight the results connected to highly hydrophobic samples because of frequent statements about the ice protective application of superhydrophobic surfaces. Unfortunately, I do not have the completed models, so the "results" part is a bit generalized and will need another modification. Nevertheless, I hope you will consider my work interesting and I am grateful to you for your help.

# Frost Formation Mechanisms for Water Droplets on Hydrophobic Surfaces Abstract

Superhydrophobicity of functional surfaces is frequently observed as an additional value for possible surface protection from ice adhesion during lower temperatures. The mechanism of ice nucleation is influenced by aspects connected to surface material, environmental conditions and water volume. The aim of this work is to show two different possibilities of microdroplet freezing modes that are strictly dependent on water contact angle, cooling rate and droplet volume. Cooling experiments were managed by decreasing the substrate temperature using a Peltier element and making a simultaneous recording of contact angle and change of climatic conditions in time at atmospheric pressure.

The formation of ice in whole volume of droplet predominated for surfaces with low contact angle (up to 120°), very slow or quick cooling (replaced by concrete values) varying for different wettability. Optimizing the moderate cooling rate in relation to droplet volume for highly hydrophobic surfaces caused dominant surface-to-volume freezing mode consisting of surface ice layer creation prior to nucleation in volume. Restriction of conditions for both mechanisms completes the understanding of freezing processes on potential superhydrophobic ice protectors and indicates the different behaviour of water droplets in various applications such as those used in the aircraft or shipping industry.

# Pavel Doubek

Abstract of an article that I will present at an international conference. The paper will be also included into the conference journal.

# Current issues of involuntary medical intervention into the physical integrity of a patient

The aim of this article is to highlight the current issues of involuntary medical treatment in the view of the fundamental right to the inviolability of the physical integrity of a person. The core of the article is the analysis of the "public interests" which justify, or in the past justified, medical intervention into the physical integrity of patient without his consent. In this study, I will answer many questions relating so called "hard cases"<sup>1</sup> in medicine. I will ask for example, whether the eugenic or social ideas in medicine are out of date or whether they are still relevant.

When analysing these issues, I am will also discuss some related issues like the criteria of medical necessity, aspect of informed consent, coercion, paternalism in health care, etc. I will support my considerations and ideas with ECHR case law, international human rights law and also with standards, reports of international monitoring bodies, as well as other sources of international soft-law. The aim of this article is to explore, what reasons currently justify involuntary medical interventions and whether these reasons are of a therapeutic nature or rather reflect some social need. To frame this perspective, let me ask another basic question: Is the patient the only one, who makes decisions about his body and life, or in the 21st century, does the state know better?

<sup>&</sup>lt;sup>1</sup> The term "hard case" referes to cases in law, that can not be easily solved by simple application of legal norm, but we have to use various interpretative tools and use legal principles. The solution of the hard case has not to have only one right answer. Pleas see more in: PATTERSON, Denis. Law and Truth. Oxford: Oxford University Press. 1996, p. 88.

# Stanislava Kováčová

The abstract was written one year ago as a summary of a theoretical article for the inaugural issue of the Electronic Journal of Central European Studies in Japan.

# Abstract

The paper first highlights the importance of dealing with methods of prejudice reduction in Central Europe in an era of globalization. It continues with a summary of the most important findings of the intergroup contact research, which shows that contact between groups of people improves intergroup attitudes. The paper reviews the history of the development of the Contact Hypothesis and the research conducted separately on direct and indirect intergroup contact. Direct intergroup contact is a face-to-face interaction with an outgroup member. Indirect intergroup contact improves attitudes by having, observing or imagining an ingroup friend who meets with an outgroup friend. Indirect contact includes a) extended contact: learning that an ingroup member has a friend from the outgroup, b) vicarious contact: observing an ingroup member interacting with an outgroup member, c) parasocial contact: observing an interaction between an ingroup and outgroup member through different kinds of media, and d) imagined contact: imagining oneself interacting with an outgroup member. Finally, the article presents the examples of successful application of the contact theory in multicultural settings.

Key words: intergroup contact, prejudice reduction, globalization

#### Hello,

Here is my abstract for manuscript called "*Rapid Detection of Fungal Pathogens in Bronchoalveolar Lavage Samples Using Panfungal PCR combined with High Resolution Melting Analysis*".

Thank you for your opinion and advices

Matěj

Despite advances in the treatment of invasive fungal diseases (IFD), mortality rates remain high. Moreover, due to the expanding spectrum of causative agents, fast and accurate pathogen identification is necessary.

We designed a panfungal PCR, which targets the highly variable ITS2 region of rDNA genes and uses high resolution melting analysis (HRM) for subsequent species identification. The sensitivity and specificity of this method was tested on a broad spectrum of the most clinically important fungal pathogens including *Aspergillus* spp., *Candida* spp., and mucormycetes. Despite the fact that fluid from bronchoalveolar lavage (BAL) is one of the most frequently tested materials there is a lack of literature sources aimed at panfungal PCR as an IFD diagnostic tool from BAL samples. The applicability of this method in routine practice was evaluated on 104 BAL samples from immunocompromised patients.

Due to high ITS region variability, we obtained divergent melting peaks for different fungal species. Thirteen out of 18 patients with proven or probable IFD were positive. Therefore, the sensitivity, specificity, positive predictive value and negative predictive value of our method were 67 %, 100 %, 100 % and 94 %, respectively.

In our assay, identification of fungal pathogens is based on HRM, therefore omitting the expensive and time consuming sequencing step. With the high specificity, positive and negative predictive values, short time needed to obtain a result, and low price, the presented assay is intended to be used as a quick screening method for patients at risk of IFD.

### Assessing mechanisms of fractures in relation to skeletal morphology of hyoid bones

Ivana Šplíchalová Abstract / journal

In the field of forensic sciences, the hyoid bone provides important evidence on the victim's biological profile (e.g., sex, ancestry, age at death) or cause of death. Fractures of hyoid bone may indicate accidental traumas (e.g., car accidents, falls), self-inflicted traumas (e.g., hanging) or injuries by assault (e.g., manual or ligature strangulation). In addition, postmortem hyoid fractures which often occur when a larynx is being harvested and examined at autopsy may easily lead to misdiagnoses. Based on a sample of 500 complete and fractured hyoid bones accompanied with autopsy reports, hyoid morphology presented by 3D digital models was non-invasively quantified by means of traditional and geometric morphometrics, mesh-based processing and multivariate statistics. Computer-aided mesh-to-mesh comparison may serve as a new approach to examine morphology of fractured hyoid bones combined with an individual's biology and circumstances of death. In the current paper, the approach yielded statistically significant differences between morphology of the hyoid bone and individual's sex, age at death and mechanism of damage. Principal Coordinate Analysis showed that chances for post-mortem damage increased with steeply sloping greater horns and their vertical flattering. As for peri-mortem damage, spreading of the greater horns in fractured bones is heading forward and superior featured with the present horizontal flattering. Yet, predictive models for diagnosis of hyoid fractures failed to provide a classification rate which would meet the requirements for an accurate and reliable technique applicable in forensic pathology, traumatology or anthropology.

\* note: for this moment, the results are temporary, most of them are still being processed

### Natalia Neuwirthová

Abstract: It is suggested for conference named Contaminated Sites. We don't have all the results yet, so it is a bit vague about results and conclusions.

Title: Currently used pesticides in soil: their fate and risks from the perspective of the total concentration based and the bioavailability approach

Pesticides used in agriculture represent one of the largest inputs of chemicals into soil. Nowadays, risk assessment associated with the presence of a chemical in soil is based on the total concentration. Despite this evidence has been collected that total soil concentration does not properly reflect the environmental risks, as it does not allow bioavailability/bioaccessibility factors to be considered. In this study, we measured the total concentrations of pesticides in soil with their bioaccessible concentrations by three non-exhaustive extraction techniques using sorbents (namely XAD, silicon rubber and Empore disk) operating under infinite sink conditions. After the optimization of the extraction time and sorbent amount, soils either with naturally occurring residues, or spiked to desired concentrations were exposed to the above mentioned sorbents. Data on the total amounts and bioaccessible fractions were compared over a range of pesticides (including non-polar, polar and ionizable currently used pesticides) and soils with varying physico-chemical properties.

#### **Discourse Analysis in Social Educational Research**

Markéta Sedláková, Masaryk University, Faculty of Education, Brno, Czech Republic

#### Abstract:

This paper presents a proposal for social education research that is included in the dissertation of the author. The author's research leanings draw from social constructionist and post-structural approaches. These approaches form the framework that bounds not only the conception of the research, but also the overall viewpoint and approach of the researcher. The author has focused her research activities on the everyday knowledge of immigrants, as representatives of a socially disadvantaged group, in the Czech educational milieu. In this study, the term immigrants is narrowed down to focus on adherents of Islam. Contemporary educational practice must reflect current sociocultural problems and the diverse environments from which social actors-students and their teachers-come. Multiculturality alongside classroom education have become topics that affect society-wide discourse. Deconstructing commonly widespread "knowledge" that may produce stereotypical, racist, or xenophobic tendencies in society appears to be one of the possible paths to harmonizing the coexistence of all social/ethnic groups. Considering the diversity of the issue, the use of discourse analysis in the research is proposed. Semistructured interviews will be used to acquire data. Discourse analysis is a theoretical research approach that is able to critically reflect on behavior and the practices of a particular discourse. Ideally, the results of such an analysis should lead to change in the given situation. The intent of this analysis is to capture the often unreflected aspects of everyday life that implicitly affect the course of the lifelong educational process. A minor objective is to map intercultural conflicts on the basis of everyday knowledge. A research report will present any possible conclusions that can be applied in informal and multicultural education practice. The use of discursive approaches in social pedagogy opens the door to studying the construction of meaning in various discursive worlds (religious, political, cultural, and everyday worlds). Peaking under the hood of different discursive contexts eliminates mutual misunderstanding of the subjective constructs of individual actors in social reality and supports tolerance. This seems to be something important in light of the multiculturality of today's world.

### Hana Dvořáková

Abstract from a paper intended for the conference proceedings. Maximum length was 100 words.

Plasma treatment of polymers is frequently used for increasing surface energy in order to improve wettability and adhesion properties. In this paper the correlation between surface energy of plasma modified polyethylene and its surface chemical composition and surface roughness was studied. High density polyethylene was treated using Diffuse Coplanar Surface Barrier Discharge in ambient air. Surface energy was estimated using sessile drop contact angle measurement. Through this changes in chemical composition were analysed via X-ray photoelectron spectroscopy. The surface roughness was investigated using atomic force microscopy and was characterized in terms of mean roughness (Ra).

# Martin Caletka

# ACCURACY OF FLOOD INUNDATION DELINEATED BY MODEL AIZM

# ABSTRACT

The AIZM model is an alternative tool for delineation of flood extent based on water levels. The model consists of several sub-models in the ESRI ArcGIS ModelBuilder located in the ArcToolbox. The input data includes the polyline of a stream, depths of water and digital elevation model. Considering the absence of hydraulics, certain deficiency has to be taken into account.

The presented study summarizes the results of the analysis on the accuracy of flood inundations delineated by the AIZM model, based on the comparison with reference flood inundations. For 30 river reaches in the Czech Republic, the accuracy of different fluvial characteristics is investigated. The comparision is carried out with respect to various return periods of designed flood events, as well as different DEM acquired by airborne laser scanning. Thus, the generally favourable characteristics of river reaches can be distinguished, from the perspective of accurate model outputs obtained.

It's a part of an extended abstract (2000 words max). I'll be glad for a review on any portion. Thank you very much!

Best Regards, Jan Rosecký

Towards Discovering the Limits of Smart Grid AMM Communication Infrastructure Jan Rosecky

• • •

# Keywords:

#### 1. Introduction

As energy distribution grids are currently undergoing massive transformations, power distributors are facing long-term investment dilemmas. A wide range of suppliers are offering their advanced metering and monitoring (AMM) solutions in terms of metering and sensor hardware, data harvesting systems, supportive communication infrastructure and more. Setting up a set of requirements posed onto each of these components and comprehending the behavior of individual technologies in large-scale setup is a vital part of the smart grid design process, which cannot simply be copied from an existing solution. On-field experiments ... show that communication forms a great bottleneck in many smart metering installations. Since stable and fast optical fibers are expensive to install everywhere and hard to maintain, two main approaches involve wireless cellular networks and power-line communication (PLC). Cellular networks can be easily overloaded ...ref... by multiple simultaneous connections to the same cell, moreover, solutions from public operators, often without dedicated QoS, suffer lower stability caused by other participants. Quality of PLC, on the other hand, is very dependent on the grid topology, power line load, power line type, number of repeater "hops" and external disturbances. ... Generally speaking, theoretical speeds achievable in laboratory conditions rarely meet the reality.

Here, we present an approach to analyzing the limits of communication infrastructures used in large-scale smart grid applications via simulations, via modeling the information ows according to metering and reading processes, as well as detailed communication network topology ans disturbances and Preprint submitted to Journal Name April 14, 2016 individual device setup. Unlike most approaches, we focus on end-to-end data delivery and data-collection process KPIs.

#### 2. Background

A common approach to smart grid communication infrastructures divides the data transmission into 3 parts: Home area network (HaN), communication platform used by smart meters, smart appliances, home production and power storage facilities. Neighborhood area network (NaN) supports data exchange between local smart meters and intelligent agents, enabling the incorporation of distributed intelligence into the grid. Localities are often delimited as areas fed by a single secondary substation. Distributors'

agents in the localities are referred-to as gateways or data concentrators [??], often placed on the substations and primarily designed to pass measured data to distributors' central systems [?]. This data exchange is already a part of a wide area network (WaN). This hierarchy corresponds to "zones" axis of SGAM ... Within the scope of the paper, we primarily focus on the technologies used in NaN and WaN communication. In the Central-European context, cellular networks or high-voltage (HV) PLC will almost certainly be used for WaN, whereas low-voltage (LV) PLCs are considered for NaN.

# 2.1. Powerline Communication

Powerline communication (PLC) uses electrical wiring to simultaneously carry both data and alternating current. PLC represents a natural way of developing communication infrastructure on existing power infrastructure (both low and high voltage). In the scope of central-European networks, it will almost certainly be used for NaN communication. Powerline communication represents a rather noisy channel, whose quality depends on a wide range of factors including current power load of the wires, external electromagnetic disturbances or powerline traffic on close wires. For longer distances, signals needs to be amplified, which is why smart meters act as signal repeaters [?] in the majority of existing installations. Several standards are relevant in the central-European area: older narrow-band, BPSK-based Meters-and-More technology [?]; newer narrow-band OFDM-based PRIME, G3 and

IEEE-1901.2; and broadband over powerline (BPL) [?].

A number of generic low-level modeling and simulation approaches have been proposed, among others [? ??????], most concentrating on OFDM, particularly PRIME or G3. While Hoch [?] considers G3 more powerful in his Matlab-simulated comparison with PRIME, experiments set up in [?] proved PRIME technology faster for the scenarios.

Major technologies have been extensively tested in on-field experiments conducted as a part of OPEN Meter initiative [?], Sendin et al. also published results form large field tests of PRIME-based meters in Spanish Iberdrola grid [?]. [?] studies PLC (and GPRS) technology behavior under various conditions, with respect to previously proposed [?] modeling methodology. [?] provides valuable long-term measurements of PLC behavior in various environments, together with simulation methodology taking into account low-level protocol overhead.

Unfortunately, the presented simulation approaches were only dealing with point-to-point communication, not taking into account repeater-enabled communication hops. In fact, none of them was focused on modeling end-to- end behavior on application level. As for models of higher levels of ISO/OS layers over PLC infrastructure, [?] presented a simulation setting with repeaters using Network Simulator 2, [?] has analyzed the effects of employing

IPv6 over low-speed PLC and \_nally [?] proposed to model network effects of the low-level power-line processes using BER and then pass it to high-level network protocols.

Since standardization is playing an important role in smart grid development, many domain-specific communication protocol on various ISO/OSIIayers have emerged (summary in [?]). Device Language Message Specification and COmpanion Speci\_cation for Energy Metering (DLMS/COSEM) is now

basically considered a standard in smart metering communication, beating legacy protocols like SML and IEC 61850 [?]. DLMS/COSEM specification is fully covered in so-called "colored books", excerpts of which are freely-available [????]. Apart from the limited-access full colored books, message specifications are available at [?]. Regarding the use of DLMS over PLC networks, several communication profiles have been introduced. Whereas Meters and More uses HDLC-based solutions, OFDM meters use TCP/IP networks, UDP in case of G3 [?].

Solely [?] has simulated transfers of DLMS messages over PLC in order to compare the standard with IEC 60870-5. Interesting work has been conducted by [?], connecting OPNET System-in-the-Loop module to Adruino Uno and Raspberry Pi nodes simulating metering devices. The nodes ran GURUX [?] implementation of DLMS server so the exchanged messages were respecting the standard. To authors' best knowledge, the remaining research questions, remain open. For given technology, measured quantities, measuring profile and reading frequency: (1) How does grid topology, disturbances and cross-talks from neighbor localities inuence end-point metering data delivery? (2) How will the alarm signaling be inuenced by normal AMM tra\_c? (3) What is the optimal setup of the information and communication processes? Should cross-talking be enabled? What is the optimal packet size? What is the best data reading strategy?

# 3. Modeling scope

In order to cover the issues, the following aspects of the AMM infrastructure need to be modeled:

- \_ Information scope { exchanged data involving quantities, events and states
- \_ Distribution grid { substations,

4. On-going Work: Smart grid communication in the Czech Republic
The joint effort of the developers of the GridMind modeling tool and
CVUT communication experts leads towards the implementation of the aforementioned tool. Firstly, a set of simulations and in-the-field measurements will be conducted, in order to map the behavior
+ CVUT, who what, evaluation approach

# 5. Conclusion

well-covered behavior of technologies, projection to high-level processes needed