



June 13-15, 2016
KRAKÓW

Call for Papers to Special Session SS04

**Event-based observations and control of
renewable energy flows in inertia-less scenario**

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Aim and scope:

This special session is to bring together researchers and practitioners from a wide spectrum of engineering disciplines including control, communication, signal processing, and electronic instrumentation dealing with the event-based sensing in general, event-based real-time observations of energy, frequency and phasors, attributes of power quality, and the control of inertia-less smart grid.

In the recent past, energy distribution panorama was dominated by timer-driven energy monitors (PMU, RTU, smart meters) reporting data at regular time instants. Averaged data are useful to support several business operations, but an important step beyond the state of the art is given by the real-time compressed/sparse approach to measurements and control. Next generation event-based energy monitors supplying the data to AMI and the SCADA were presented first time during the EBCCSP-2015. Fossil and nuclear fuel power requires long supply lines in order to provide almost constant flow of fuel. It lends itself to centralized power systems. In the 20th century electricity system, huge fossil power plants required enormous concentrations of capital, concentrating not only power generation but control of the grid.

The advent of renewable kinds of energy determined disruptive changes. Wind, solar, and geothermal energies are available everywhere and are broadly commercially viable. The economies of scale of both wind and solar are much more modest: no long supply lines and much smaller capital requirements for cost-effective energy production. Renewable energy lends itself to a decentralized system of power generation and ownership. Technically speaking, 99% or more of renewable energy is incompatible with big coal and nuclear power plants that cannot adjust their output to accommodate more wind and solar. New control requirement is about scaling the production rapidly to adjust to fluctuations in demand/response (events).

Topics within the scope of the Special Session:

We will consider any kind of contribution related to event-based approach to observations, measurements, and control without restrictions on topics. We invite theoretical and applied research work. We encourage practical applications.

Submission of Papers: The working language of the conference is English. The special session papers are limited to 8 double column pages in a font no smaller than 10-points. Manuscripts must be submitted electronically in PDF format, according to the instructions contained in the Conference web site.

Further Information: EBCCSP 2016 Conference Secretariat: Tel: + 48 12 617 3034, Fax: + 48 12 633 2398; Email: ebccsp16@agh.edu.pl

Paper Acceptance: Each accepted paper must be presented at the conference by one of the authors. The final manuscript must be accompanied by a registration form and a registration fee payment proof. All conference attendees, including authors and session chairpersons, must pay the conference registration fee, and their travel expenses.

No-show Policy: The EBCCSP 2016 Organizing Committee reserves the right to exclude a paper from distribution after the conference at IEEE Xplore if the paper is not presented at the conference.

Author's Schedule:

Deadline for submission of special sessions papers:

March 20, 2016

Notification of acceptance of special sessions papers:

April 10, 2016

Final manuscripts due – special sessions:

May 1, 2016

<http://www.ebccsp2016.org>