BPM NEWSLETTER

BPM 2014: ANOTHER SUCCESSFUL BPM CONFERENCE AFTER A LAST MINUTE RELOCATION TO EINDHOVEN

The preparations for **BPM 2015** in **Innsbruck** are running at full speed. This newsletter provides information on the upcoming conference.
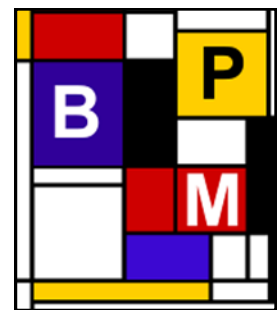
However, we also reflect on **BPM 2014** in Eindhoven and discuss other news from the BPM community. This year's conference was planned to take place in Haifa. Unfortunately, the continuous uncertainty in Southern Israel and Gaza in the months before the conference made this impossible. Just a few weeks before, it was decided to move the conference to Eindhoven. **Eindhoven University of Technology (TU/e)**, in particular the **AIS group of**

Wil van der Aalst and the **Data Science Center Eindhoven (DSC/e)**, hosted the conference. The first BPM conference (**BPM 2003**) also took place at TU/e.

Despite the last minute change of location there were over 200 participants. The PC chairs (Shazia Sadiq, Pnina Soffer, and Hagen Völzer) compiled an excellent scientific program with many innovative papers and exciting talks. Together with the 10 workshops and co-located events like the doctoral consortium, the WS-FM 2014 workshop, and the Annual meeting of IEEE Task Force on Process Mining, BPM 2014 provided a good overview of the state-of-the-art in Business Process Management.

Hope to see you all again in Innsbruck for BPM 2015!

- **Next stop: BPM 2015 in Innsbruck**
- **Message from PC Chairs of BPM 2014 & 2015**
- **Report on the BPM Tools Database**
- **Deadline for workshop proposals: December 4st, 2014**
- **BPM 2014 awards**
- **Changes in the SC**
- **MOOC on process mining**
- **News from the community**

BPM 2014 AWARDS

During the BPM Conference Dinner several awards were handed out by the various BPM chairs.

The **BPM 2014 Best Paper Award** was won by **Massimiliano de Leoni**, **Wil van der Aalst**, and **Marcus Dees** for their paper **A General Framework for Correlating Business Process Characteristics**. The paper provides a general framework for deriving and correlating process characteristics based on event logs. The framework is highly generic and implemented as plug-in for ProM. The approach was evaluated using various case studies within the UWV (the Dutch Employee Insurance Agency).

The **BPM 2014 Best Student Paper Award** was won by **Abel Armas-Cervantes,** a PhD student from the University of Tartu. He wrote his winning paper with Paolo Baldan, Marlon Dumas, Luciano García-Bañuelos. The paper **Behavioral Comparison of Process Models Based on Canonically Reduced Event Structures**. addresses the problem of diagnosing behavioral differences between pairs of business process models. The proposed solution is

The BPM 2014 awards show that Business Process Management research has matured over the last decade and at the same time is constantly adapting to new needs, e.g., making sense of event data or managing large collections of models.

based on a translation from process models to Asymmetric Event Structures (AES).

Sander Leemans won the Best **Demo Award** for his presentation and the demo-paper **Process and Deviation Exploration with Inductive Visual Miner** (with Dirk Fahland and Wil van der Aalst).

The **best dissertation in Process Mining 2014 certificate** was awarded to **Andrea Burattin** for his PhD thesis entitled **Applicability of Process Mining Techniques in Business Environments**.

The **best student report** award for the **BPI Challenge 2014** was awarded to Gabriele Cacciola, Raffaele Conforti and Hoang Nguyen for their submission entitled **Rabobank: A Process Mining Case Study**. The **best report BPI Challenge 2014** certificate was awarded to Pierre Buhler, Rob O' Callaghan, Soline Aubry, Danielle Dejoy, Emily Kuo, Na-

talie Shoup, Inayat Khosla, Mark Ginsburg, Nicholas Hartman and Nicholas Mcbride for their submission entitled **Service Desk and Incident Impact Patterns Following ITIL Change Implementation**.

Next year there will be another BPM **Test of Time Award**. This award is given every two years. At BPM 2015 in Innsbruck the award will be given to the most influential paper presented at BPM 2005 in Nancy and BPM 2006 in Vienna.

BPM SC WELCOMES BARBARA WEBER

Last year **Peter Dadam** and **Arthur ter Hofstede** stepped down from the **BPM Steering Committee** (BPM SC). Both supported the conference since its inception in 2003. The BPM SC is grateful for their efforts during the last 12 years and acknowledges their great contributions. In its annual meeting the BPM SC decided to invite **Barbara Weber** as a new steering committee member and she gladly accepted. Barbara is a well-known member of our BPM community.

Not only is her scientific work well-known, she also actively supported the BPM conference in numerous roles. For example, she served twice as demo chair and in 2013 she was program chair. She was also very active in organizing BPM workshops (e.g., the BPI workshop series). Moreover, she will be the main organizer of **BPM 2015 in Innsbruck**. Given her seminal contributions to the conference, the BPM SC is looking forward to working with her.

REFLECTIONS ON BPM 2014 BY PC CHAIRS

The 12th International Conference on Business Process Management successfully concluded on Sep 12th, 2014. Although this year we had to face the unstable reality of the world we live in, resulting in the relocation of the conference from Haifa, Israel to Eindhoven, The Netherlands, the technical program continued to expand in both quality and scope.

We welcomed over200 participants in the joint workshop and conference program. 30 papers were presented at the conference in 9 sessions covering User Centred Process Approaches, Discovery and Monitoring, Process Enabled Environments, Process Discovery, Industry Session, Integrative BPM, Process Analytics, Resource and Time Management in BPM, and Declarative Processes. The best student paper was awarded to Abel Armas-Cervantes, Paolo Baldan, Marlon Dumas and Luciano García-Bañuelos for their work on "Behavioral Comparison of Process Models Based on Canonically Reduced Event Structures". The BPM2014 best paper award went to Massimiliano de Leoni, Wil van der Aalst and Marcus Dees for their paper "A General Framework for Correlating Business Process Characteristics".

The BPM research community has a long tradition of translational research and contributions to technology and practice. This was visible in the large demo session this year consisting of 18 demos. The demo jam session of 90 second presentations was highly appreciated. It simultaneously provided the audience the opportunity to learn the key message of all presented demos, and at the same time allowed the presenters (many of which are research students) an opportunity to pitch their key idea in an effective way.

We were most fortunate to have two inspirational keynotes from thought leaders in industry. Rob High from IBM, highlighted the emerging era of cognitive computing and how it has the potential to fundamentally change our approach and capacity to identify new insights and new opportunities. Rob inspired us all by indicating that BPM

The BPM research community has a long tradition of translational research and contributions to technology and practice.

research will have a key role in this new era to enable opportunities to be changed into action. Our second keynote speaker, Keith Swenson from Fujitsu challenged some of the fundamental assumptions that form the foundation of BPM. Going forward in an unpredictable and increasingly complex business environment, Keith raised many questions that a learning, continuously improving organization must face. We are thankful to Keith for giving us the inspiration to pursue these questions as a collective and strong community of BPM researchers.

Besides the main conference program, BPM was preceded by a busy workshops day and a productive doctoral consortium. An important addition to the scientific side was the social side. The Eindhoven team managed to organize a social event on each and every evening of the conference. The main event was the conference dinner, which was held at the DAF Museum, and included the awards ceremony and a presentation by the BPM 2015 team outlining the plans for next year.

As we hand over the reigns to next year's PC Chairs Matthias Weidlich, Jan Recker, and Hamid Motohari, we are more confident than ever that the conference will continue to grow in quality and scope. The BPM2015 team has not only embraced our initiative this year to expand the scope and have a topic-oriented submission and reviewing process, but is undertaking a range of initiatives that will assist BPM researchers to reach out to other areas as well as researchers in other areas to find synergies with us. We look forward to next year's conference in Innsbruck, Austria.

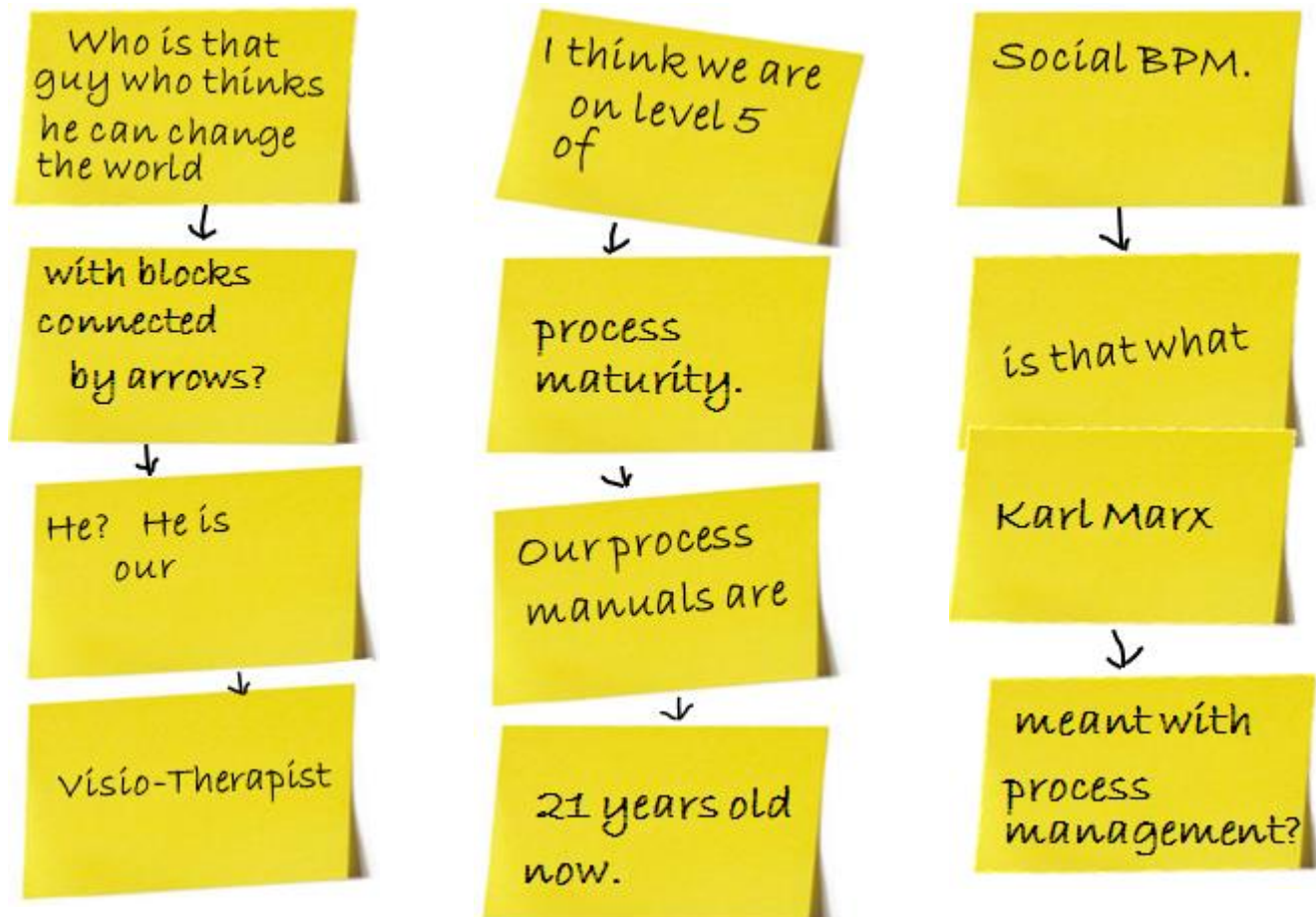Pnina Soffer, Hagen Völzer and Shazia Sadiq (BPM2014 PC Chairs)

PROCESJE: ANOTHER PLAYFUL VIEW ON BPM

Inspired by the "daily astonishment in the BPM world", an anonymous Dutch BPM practitioner started to make **'procesjes'** (little processes) to reflect on BPM trends in a playful manner. This page shows some example 'procesjes'. If you want to see more funny BPM posts, please visit **Procesje.nl** or follow **@Procesje** (occasionally also in English) on twitter.

"Procesje" reports on the irrational behavior of organizations and people thus putting BPM technology in perspective.

SOCIAL EVENTS AT BPM 2014

Next to listening to presentations, BPM 2014 participants used the opportunity to socialize and exchange novel ideas.
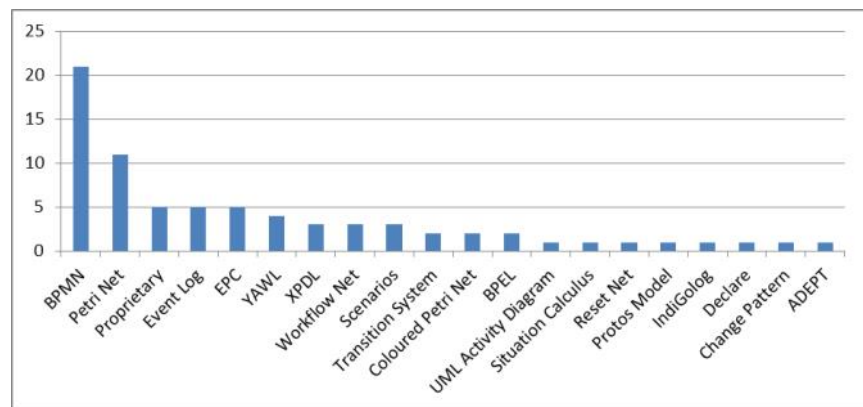
To facilitate interaction, several social events were organized. On Sun-

day there was a Doctoral Consortium dinner, on Monday there was the Workshop dinner followed by a "Process Mining Party", on Tuesday there was a Welcome Reception at TU/e. The conference dinner on Wednesday took place at the DAF museum. On Thursday the conference ended with after conference drinks hosted by the study association GEWIS and the WS-FM workshop dinner.

REPORT ON BPM TOOLS DATABASE

The development of tools is an important aspect in scientific research in general and in our domain in particular, because tools can show the relevance and applicability of our research results. Therefore the BPM Steering Committee decided to set up a web application that allows researchers and practitioners to **register tools supporting all aspects of BPM**, including prototypes and products. This web application is known as the **BPM Tools Database**; it was developed by the Business Process Technology research group at the Hasso Plattner Institute in Potsdam, Germany.
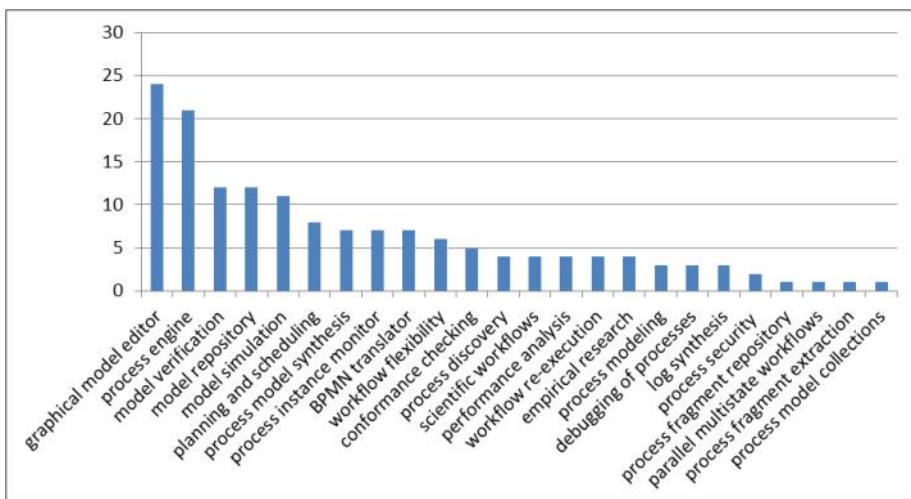
The main goal of the BPM Tools Database is to increase the visibility of BPM tools and to foster their uptake and dissemination. Since the web application went online earlier this year, more

than 50 tools have been registered. As shown in the diagram below, these tools span a broad spectrum of functionality, ranging from process modelling and enactment to process frag-

ment extraction and process model collections. The two diagrams show (i) the **features** and the number of tools that support them and (ii) the **process modeling languages** and the number of tools that support them. These illustrate the diversity of BPM tools. If you got interested in the BPM Tools Database, please visit **http://bpm-conference.org/bpt-resource-management,** where you can register your BPM tool and where you can search for tools that might be useful for your research in business process management.

Mathias Weske (SC member)

BPM 2015 comes closer and closer. Thus, it is getting time for everyone interested in BPM to start thinking how to get involved in BPM 2015, which is moving in its **13th edition** to **Innsbruck**. We invite all researchers and practitioners in the field of BPM to share your work either as a paper author at the conference or one of the associated workshops, as a workshop organizer, as a tutorial presenter or panelist, as a demo presenter, or by participating in the conference. **There are many good reasons for you to consider BPM 2015.** If you want to have inspiring discussion with colleagues, enjoy Tyrol's breathtaking scenery and stunning mountains, spend some time hiking, biking, or climbing, experience Innsbruck from an Alpine ibex's perspective, or see the

facilities where several Winter Olympic Games took place (1964, 1976, 2012 Youth Olympic Games), enjoy some of the delicious Austrian pastries like Apfelstrudel or Kaiserschmarrn - in short, come to Innsbruck and attend BPM 2015 to discuss your exciting ideas and enjoy our inspirational environment, both within the conference and beyond.

Barbara Weber (General chair of BPM 2015)

IN MEMORIAM SKIP ELLIS

Earlier this year Clarence "Skip" Ellis passed away unexpectedly at the age of 71. Clarence "Skip" Ellis can be seen as the founder of the Workflow/BPM area. Ellis was a pioneer in Computer Supported Cooperative Work (CSCW) and Groupware. He and his team at Xerox PARC created OfficeTalk, one of the first groupware systems. He already developed workflow systems using Petri nets in the late 70-ties. He was also the first African American to receive a Ph.D. in Computer Science (1969). He gave a keynote talk at the first BPM conference in 2003 in Eindhoven. People that knew him well, will remember as a very special person, always emphasizing the human and social side of IT.

MESSAGE FROM THE BPM 2015 PC CHAIRS

After a successful BPM2014 event at Eindhoven, we are turning our attention to next year's event. We look forward to an exciting and inspiring 2015 conference in Innsbruck. As Program Chairs, we will work dedicatedly to do our best to ensure an insightful and inspiring high-quality scientific program showcasing the latest and the best in research on business processes and their management.

Our view is that BPM as a research field and as an industry practice has significantly matured and increased its span, but is also facing new and unprecedented challenges such as a need to foster true innovation rather than improvement, to make use of big data opportunities and to account for processes that are increasingly adaptive, flexible and generative rather than structured, formalized and stable. These new topics add to existing areas of interest and relevance to BPM research and industry. They also attest to an increasingly interdisciplinary nature of BPM research, which puts the conference in close connection to disciplines such as Information Systems, Management and Organizational Science, Data and Knowledge Management, Web/Software Engineering, Service-Oriented Computing, Social Computing, Cloud Computing, Big Data, Cognitive Computing, and many more.

In 2015, therefore, we will explicitly encourage papers that report on research in emerging BPM areas and novel applications of BPM technologies, as well as interdisciplinary BPM research that connects to Operations Research, Artificial Intelligence, and Sensor Technologies. To foster such submissions, BPM 2015 will include two new thematic areas, "BPM in a broader context" and "Emerging areas of BPM". Of course, we will at the same time continue to welcome papers on traditional BPM topics such as modelling, improvement, execution and mining.

We are excited to announce that we gathered the support from several esteemed researchers from within BPM as well as related fields that will act as topic champions to promote and oversee contributions to the different areas (see table).

We now work on strategies that will promote submissions to BPM2015 from both the established communities and the neighboring disciplines, and we hope that the communities themselves will assist us and the topic champions in this endeavor.

We further want to highlight the relevant deadlines so that we can all prepare our work to be completed and written up in time for submission:

* Abstract submission: 08.03.2015

* Full papers submission: 15.03.2015

* Notifications: 15.05.2015

* Camera ready papers: 15.06.2015

In closing, we would also like to ask you to spread the word about BPM 2015. Please link to the BPM 2015 website, **http://bpm2015.q-e.at,** and follow **@BPMConf** on Twitter!

Hamid Motahari, Jan Recker, Matthias Weidlich (PC chairs BPM 2015)

* BPM in a broader context: the intersection of BPM and other disciplines
   Topic champions: Roel Wieringa, Avigdor Gal, Mathias Weske
   * Artificial intelligence in BPM
   * Automated planning in BPM
   * Sensor technologies and BPM
   * Scientific workflows and BPM
   * Software process management
   * Security and Risk Management in business process execution
   * Operations research for business processes
   * Requirements engineering and goal modelling

* Emerging areas of BPM
   Topic champions: Florian Daniel, Akhil Kumar, Farouk Toumani
   * BPM in the cloud and cloud technologies for BPM
   * Big Data for new process insights
   * Human-centric processes
   * Knowledge-intensive and loosely structured processes
   * Process-enhanced groupware
   * BPM in social networks and social networking for BPM
   * User-centric aspects of process management and use
   * Distributed and mobile processes

* Management and applications of BPM in practice
   Topic champions: Michael Rosemann, Jan vom Brocke, Hajo Reijers
   * Business process lifecycle management
   * Relationship between business strategy and business processes
   * Success factors and measures in BPM
   * Business process improvement and innovation
   * BPM governance and compliance management
   * BPM maturity
   * Adoption and Practice of BPM

* Process execution and data management
   Topic champions: Marlon Dumas, Stefanie Rinderle-Ma, Boudewijn van Dongen, Michael zur Muehlen
   * Process-oriented and service-oriented software architectures
   * Workflow management systems
   * Process tracing and monitoring
   * Resource management in business process execution
   * Process performance measurement
   * Adaptive and context-aware process execution
   * Process mining
   * Analytics and visualization of big process data
   * Process data warehousing
   * Data streaming in business processes

* Fundamentals and theory of process modelling
   Topic champions: Jörg Desel, Marcello La Rosa, Pnina Soffer, Jianwen Su
   * Foundations of business process models
   * Process modelling languages, notations, patterns and methods
   * Reference process models
   * Foundation of process model design and synthesis
   * Artefact-centric processes
   * Process architectures
   * (Adaptive) Case management
   * Variability and configuration of process models
   * *Process model management and repositories*

PROCESS MINING COURSE EXPECTED TO ATTRACT OVER 35.000 PARTICIPANTS

On November 12th 2014, the Massive Open Online Course (MOOC) **Process Mining: Data Science in Action** will start. Already more than 22.000 people registered and this number is expected to rise to more than 35.000 (the course runs for six weeks). The Coursera course, which is based on Wil van der Aalst's Process Mining book, explains the key analysis techniques in process mining. Participants will learn various process discovery algorithms, which can be used to automatically learn process models from raw event data. Moreover, approaches to check conformance and to analyze bottlenecks will be presented. The course is supported by software (ProM and Disco) **allowing participants to analyze real-life data sets during the course**. The huge interest in this process mining can be explained by the increasing interest in the Data Science profession ("sexiest job of the 21st century") and the need to make BPM more "evidence based".

You can find more information and register for free here: https://www.coursera.org/course/procmin.

CALL FOR BPM 2015 WORKSHOP PROPOSALS

An exciting part of each of the conferences in the BPM series is the **workshop day**. We will continue this tradition for BPM 2015, and planned 31 August 2015 for this event. **On this day, a number of workshops will take place that have a strong relation with the BPM theme, but also connect to other disciplines, domains or emerging trends.**

In the coming weeks, **we are keen to receive proposals for such workshops**. Do you have a great, new topic in mind? Or did you organize a workshop for BPM 2014 that you wish to contin-

ue? Send us your proposal, in which you will at least cover:

- The title for the workshop and an acronym;
- An outline of the workshop theme, goals, planned activities, and the intended audience;
- ·An indication of whether the work-

shop is planned as a full day or a half day event;
- The targeted or past acceptance rate(s) and number of submissions;
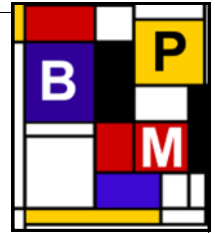- A brief biography of each organizer;

- The activities envisioned to stimulate submissions to the workshop;
- The tentative PC and call for papers.

Workshop proposals may be submitted as an A4 PDF document **before December 4,** 2014 via: https://www.easychair.org/conferences/?conf=bpmws2015.

Before December 18, we will evaluate all proposals and determine the program for the workshop day of BPM 2015.

Manfred Reichert and Hajo Reijers (Workshop chairs BPM 2015)

Visit
bpm-conference.org

The goal of this newsletter is to further strengthen the BPM community that has been formed over the last decade. The newsletter appears twice per year. Input for the next newsletter is welcome (e.g. activities related to the BPM conference, interviews, contests, new datasets, tools, etc.).

EVENTS AND ACTIVITIES OF THE COMMUNITY

BPM 2016 will take place in **Rio de Janeiro, Brazil.** The Federal University of the State of Rio de Janeiro (UNIRIO) will organize the event. **Flavia Santoro** will be the general chair of this event.

The deadline for the special BISE issue on **BPM Use Cases: Structuring the Business Process Management discipline** is **March 1st 2015**. The special issue of the **BISE (Business & Information Systems Engineering) journal** invites survey paper and other papers that aim to structure our discipline (or parts of it) in a novel way. See DOI 10.1007/s12599-014-0340-6 for the call for papers.

The workshop **Algorithms & Theories for the Analysis of Event Data (ATAED'2015)** is a satellite event of both the Petri nets 2015 and ACSD 2015. The workshop aims to attract papers related to Process Mining, Region Theory and other synthesis techniques. These techniques have in common that "lower level" behavioral descriptions are used to create "higher level" process models. The deadline for submitting papers is **May 10th, 2015**. See http://www.ulb.ac.be/di/verif/pn2015acsd2015/ for more information.

Visit **bpm-conference.org** for earlier newsletters, conferences, and BPM tools.