

Call for Papers and Contributions

(<http://www.pi.events/call-for-papers>)

The introduction of the Physical Internet (PI, π) has opened a paradigm-breaking field encompassing the hyperconnectivity and interoperability of smart logistics networks, transportation systems, manufacturing systems and supply chains, enabling seamless open asset sharing and flow consolidation on a massive scale. It aims to transform the way physical objects are moved, deployed, realized, supplied, designed and used all around the world so as to improve by an order-of-magnitude the overall induced performance in terms of economical, environmental and societal efficiency and sustainability.

IPIC 2016 aims to provide an open forum for researchers, innovators and practitioners to introduce leading edge concepts and methodologies; to review the state-of-the-art technologies and latest projects, and to identify critical issues and challenges for future Physical Internet induced research, innovation and implementation.

IPIC 2016 invites you to submit an original research or innovation contribution to the conference.

- A research contribution can for example report on conceptual research, assessment research, instrumental research and validation research;
- An innovation contribution reports on novel applications and technologies, on ongoing projects and case studies, or innovative ideas and positions.

Contributions can take three forms: papers, posters and presentations.

- Papers and posters will be made widely available on <http://www.pi.events> and physicalinternetinitiative.org;
- Papers and posters must respect the guidelines and templates provided on the conference website;
- Authors of papers and presentations will be invited to present them in related conference workshops;
- The best research papers will be targeted for extension toward publication in special issues of scientific journals;
- The best innovation papers will be targeted for adaptation toward publication in special issues of professional journals;
- Posters and their authors will be the highlight of a cocktail event on the first day of the conference.

The contributions may be related, yet not limited, to the following topics:

- **Physical Internet Fundamentals**
 - Proposition of conceptual Physical Internet frameworks
 - Investigation of key enabling constituents of the Physical Internet
 - Open Logistics Interconnection model for hyperconnected logistics service architecture
 - Hyperconnected logistics protocols
 - Efficiency, sustainability, resilience, security, adaptability, agility of the Physical Internet and hyperconnected logistics
- **Physical Internet Constituents**

- PI container design & engineering: transport, handling and packaging container design and engineering; Modularization and Standardization; Smart and active containers; Panel oriented container design; Interaction with encapsulated smart objects; Container logistics and business
- Design, engineering, planning and operation of hyperconnected handling, storage and transportation technologies, systems, facilities and infrastructures

- **Technology vs. Physical Internet**
 - Novel ICT platforms enabling Physical Internet and hyperconnected logistics
 - Impact of new technologies and concepts such as drones, mobile robotics and 3D printing on the Physical Internet and hyperconnected logistics;
 - Exploitation of Internet-of-Things in the Physical Internet for tracking, tracing, sensing, event management and prediction
 - Technologies for container tracing and asset monitoring through the Physical Internet, such as wireless sensor networks (WSN)
 - Event service and management in hyperconnected logistics networks

- **Physical Internet Implementation and Governance**
 - Physical Internet implementation drivers and issues
 - Stakeholder incentives for PI adoption and implementation
 - Negotiation, collaboration and conflict resolution within Physical Internet
 - Impact of regulatory innovation on PI
 - Impact of PI induced innovation on regulation, taxation and duties
 - Design of the Physical Internet governance structure and processes

- **Investigation and instrumentation methodologies**
 - Novel descriptive, predictive and prescriptive analytics; modeling; simulation; optimization and gaming approaches for Physical Internet research and instrumentation
 - Qualitative and quantitative methodologies for studying proposed or existing PI induced systems, processes, phenomena & business models
 - Decision models and supports in the Physical Internet context

- **Hyperconnected logistics**
 - Hyperconnected [transportation, distribution, manufacturing, supply chain and/or service]
 - Open hyperconnected logistics networks performance and impact assessment
 - Logistics asset sharing, flow consolidation and load optimization
 - Hyperconnected synchronomodality
 - Smart hyperconnected inventory deployment and management
 - Hyperconnected City Logistics and Last-Mile Delivery
 - Hyperconnected crowdsourced delivery and transportation
 - Hyperconnected cloud storage

- Hyperconnected backbone logistics networks
- Hyperconnected modular production
- Mobility web, distribution web, realization web, supply web and service web

- **Hyperconnected cockpits and control towers**
 - KPIs, cockpits, control towers for hyperconnected logistics
 - Concepts, technologies and processes for hyperconnected cockpits & control towers
 - Models and algorithms feeding the cockpits, enabling the analytics, advising the decision makers and easing the open collaboration
 - Collaborative behavior of users of hyperconnected cockpits & control towers

- **Hyperconnected business models**
 - Business models, revenue models and profit models in hyperconnected logistics
 - Liability and insurance issues in hyperconnected logistics
 - Hyperconnected business model innovation

Full papers (research, white paper or case study) must respect the format guidelines which are available via the [templates available within the conference website](#). Full papers should be between 6 and 16 pages long (including figures and references), and clearly indicate the list of authors and their affiliation. All contributions are to be in English. Submitted contributions will be evaluated with regards to their suitability for the conference, originality and technical soundness.

Contributions are welcome via

<https://easychair.org/conferences/?conf=ipic2016>

Please see <http://www.pi.events/call-for-papers> for important dates and deadlines