

2<sup>nd</sup> Workshop on Conceptual Modeling, Ontologies and (Meta)data Management for Findable, Accessible, Interoperable and Reusable (FAIR) Data (CMOMM4FAIR)  
Co-located with the 39th International Conference on Conceptual Modeling (ER 2020), November 3-6 2020, Vienna, Austria  
Submission Deadline: 27 July 2020

Date:  
03 November 2020 - 09:15 to 06  
November 2020 - 16:15  
Location:  
Vienna, Austria

In an increasingly complex and heterogeneous environment, significant effort is required to efficiently work with data and other digital objects. The Findable, Accessible, Interoperable and Reusable (FAIR) principles were elaborated to tackle these problems, describing a minimal set of requirements for data stewardship towards higher data reusability. The FAIR principles have been gaining significant attention in different areas of the society, crossing international borders and, knowledge and application domains. A number of initiatives such as GO-FAIR, the Research Data Alliance (RDA) and the permanent Committee on Data of the International Council for Science (CODATA) are focusing on different aspects of FAIR.

In order to improve findability, accessibility, interoperability and reusability of different types of digital objects at scale, the FAIR principles focus on machine actionability. Therefore, a critical aspect to achieve this machine actionability is semantics. Proper semantic descriptions should be available to make "intelligible" for computational agents the elements of a FAIR data ecosystem such as data policies, data management plans, identifier mechanisms, standards, FAIRification processes, FAIRness assessment criteria and methods, data repositories and supporting tools.

The goal of the workshop on Conceptual Modeling, Ontologies and Metadata Management for FAIR Data is to discuss challenges, solutions and impact of, for one side, the use of conceptual modeling and metadata and data management to support the improvement of FAIRness in digital objects and, for the other side, the adoption of the FAIR principles to guide improvements in conceptual modeling.

## Topics of Interest

The topics of interest include, but are not limited to, the following:

- Semantic descriptions of FAIR digital objects
- Cross-domain interoperability
- Different aspects of conceptualizations for research outputs
- Best practices on modeling FAIR data
- Assessment of FAIR principles practices and implementations
- Data and services integration in FAIR environments
- FAIR data management and stewardship
- Novel applications of the FAIR principles
- Metamodeling
- Metrics modeling for FAIRness assessment
- Provenance modeling in FAIR environments
- IoT and FAIR
- Architectures for FAIR repositories and networks
- Challenges in FAIR data management and modeling
- Modeling and managements challenges in FAIR e-Science infrastructures
- FAIR data analytics
- Workflows and process modeling for FAIR environments
- Data and metadata foundation, vocabulary and terminology



- Modeling issues at different interoperability levels, e.g., legal, application, social
- Use of the FAIR principles in conceptual modeling challenges

## Important dates

- **Workshop paper submission: 27 July 2020**
- Author notification: 17 August 2020
- Camera-ready version: 7 September 2020

## Submission guidelines

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Papers must not exceed 10 pages (including figures, references, etc.) in length using the LNCS template. Submissions are handled in the EasyChair system. Click [here](#) to submit your paper. Accepted papers will be published in the LNCS series by Springer. Note that only accepted papers presented in the workshop by at least one author will be published.

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