

# **29th International Symposium on Temporal Representation and Reasoning**



**Monday, 24 October 2022 - Wednesday, 26 October 2022**

## **Scientific Programme**

### Aims and Scope

Since 1994, the TIME International Symposium on Temporal Representation and Reasoning aims to bring together researchers in the area of temporal representation and reasoning in different areas of Computer Science and related disciplines.

TIME 2021 will be organized as a combination of technical paper presentations, keynote talks, and tutorials.

Besides sustaining the traditional three tracks (Time in Artificial Intelligence, Temporal Databases, and Temporal Logic and Reasoning) TIME 2021 in particular wants to stimulate cross cutting concerns.

TIME 2021 will be a hybrid conference. We are planning to have virtual participation for delegates and online presentations. We will also try to allow also an in-presence participation, according to the rapidly evolving pandemic situation.

### Tracks

Time in Artificial Intelligence

Temporal Databases

Temporal Logic and Reasoning

### Special Tracks

Temporal representation and reasoning for Covid-19

we are looking for submissions dealing with temporal issues in any context having to manage Covid-19 pandemic (healthcare, medicine, social contexts, school, and so on)

Temporal explainability: connecting symbolic and sub-symbolic temporalities

we are looking for submissions dealing with some kind of temporal logics/system/rules/visualization for interpreting/explaining the results of machine learning algorithms considering temporally relevant problems.

### Journal Special Issues

As in recent years we plan to invite authors of selected papers to submit an extended version of their contribution to special issues of the journal Information and Computation (to be confirmed) and in addition selected papers of the special track will be invited to a special issue on Temporal representation and reasoning for Covid-19 in the journal Artificial Intelligence in Medicine.

### Topics

Topics for TIME 2021 include (but are not limited to):

Spatial and temporal reasoning

Temporal data models and query languages

Time in natural language processing

Temporal data mining

Temporal constraints: representation and reasoning

Time series data management

Spatio-temporal knowledge representation systems

Data currency and expiration

Reasoning about actions and change

Planning and planning languages

Ontologies of time and space-time

Belief and uncertainty in temporal knowledge

Temporal learning and discovery

Temporal query processing and indexing

Stream data management  
Spatio-temporal data management, including moving objects  
Indeterminate and imprecise temporal data  
Specification and verification of temporal properties  
Model checking algorithms and implementations  
Temporal aspects of agent- and policy-based systems  
Temporal aspects of service level agreements  
Temporal aspects of business process modeling and management

#### Submission & Publication

TIME 2021 accepts submissions in PDF format, no longer than 12 pages excluding references and appendix. The appendix is limited to 5 pages, and the reviewers may or may not take it into account for their recommendation. Submissions must be formatted following the LIPIcs instructions (<https://submission.dagstuhl.de/documentation/authors>), and preferably redacted in LaTeX. All submissions have to be made electronically via easychair at <https://easychair.org/conferences/?conf=time20211> (details at [time2021.aau.at](https://time2021.aau.at)).

#### Important Dates

Update of submitted papers possible until: May 24, 2021  
Papers and abstracts due: April 23, 2021 May 24, 2021  
Notification: June 15, 2021 June 23, 2021  
Final camera-ready version: July 4, 2021 July 7, 2021  
Conference: September 27-29, 2021

Submissions to TIME 2021 must be original, parallel submissions of the same material to other conferences or journals are not allowed. Accepted papers will be presented at the symposium and included in the proceedings, which will be published by LIPIcs-Leibniz International Proceedings in Informatics (<https://www.dagstuhl.de/en/publications/lipics/>), a series of high-quality peer-reviewed conference proceedings which are published according to the principle of OpenAccess. At least one author of each accepted paper must register at the conference and present either virtually or (if possible) in person. In-person participation in the symposium will not be a prerequisite for publication.