**Academic Event Ontology (AEON)**

**Context**

AEON is currently a work in progress and far from a final product, as can be seen by the version number. It's not ready for productive systems.

A first draft of AEON was discussed at the [VIVO Ontology Workshop in February 2020](https://docs.google.com/document/d/1C9vs3_pCqhS_ujcqmUeu9TSXtgxFIvsBv-fW3sXl7yk) with regard to the process of renewing the VIVO ontology to make it [BFO](https://basic-formal-ontology.org/) conform.

The application ontology of the TIB project [ConfIDent](https://projects.tib.eu/en/confident/), will hopefully serve as meaningful input for AEON, due to its data driven development. This entails importing academic event metadata from donators and existing datasets, such as [OpenResearch](https://www.openresearch.org), [EventKG](https://github.com/saidfathalla/EVENTSKG-Dataset), [DBLP](http://dblp2.uni-trier.de/) and [NASA/ADS](https://ui.adsabs.harvard.edu/), in order to identify the needed classes, object and data properties by analysing their relevance in these datasets.

Additional analysis is needed regarding terms and entities of related ontologies, such as:

* [SEO - The Scientific Event Ontology](http://kddste.sda.tech/SEOontology/Documentation/)
  + reuses:
    - [Semantic Web for Research Communities Ontology](https://lov.linkeddata.es/dataset/lov/vocabs/swrc)
    - the [conference-ontology](http://www.scholarlydata.org/ontology/conference-ontology.owl) from scholarlydata.org
* s[chema.org/event](http://www.schema.org/event) & [schema.org/eventseries](http://www.schema.org/eventseries)
* [GND Ontology](https://d-nb.info/standards/elementset/gnd) (not very elaborate for events)
* [BIBO](http://bibliontology.com/) has some classes for conferences and alike events
* [FRAPO](https://sparontologies.github.io/frapo/current/frapo.html#d4e2645) - has classes like conference fee etc.
* [FaBiO](https://sparontologies.github.io/fabio/current/fabio.html) - has classes for publications as conference output

[**Domain Definition**](https://docs.google.com/document/d/1e7MWIO7IZHtj1Ww-pXswcQVDO7rIs8aQwwgnKk2KQ-o)

An academic event is a gathering of scholars and researchers to prsent their work, hear others present, and discuss the latest developments within their field. Some examples of academic events include conferences, symposia, workshops, colloquia, talks, hackathons, meet-ups, seminars, and forums.

The Academic Event Ontology (AEON) is used to represent information regarding academic events. The ontology supports the identification, development, management, evaluation, and impact assessment of events, components of events and event series, as well as identification and reuse of works presented or developed at events. The ontology is independent of knowledge, creative domain, or topics related to events. AEON is focused on events and assumes the representation of many entities associated with events such as attendees, locations, academic works, datetimes, and processes are defined in compatible ontologies.

**Ontology Competency Questions**

AEON seeks to represent information about events to answer the questions below as examples. Many additional questions regarding events should be answerable.

1. Basic information about the event: its date, type (conference, workshop, symposium, etc.) location (including multiple and virtual), topics, name, program/agenda
2. Who attended the event? Who presented? Who served on panels?
3. What deadlines are associated with the event such as registration, submission
4. Who was on the organizing committee? Who were the local organizers? The reviewers?
5. Was the event part of a series? Who is responsible for the series?
6. Who won awards presented at the event?
7. What material was presented at the event? Papers, posters, presentations, demonstrations
8. Were there panel sessions, workshops? Who attended them?

**Consequences and observations**

* AEON represents information useful in assessing the research impact of an event.
* Awards are outside the domain of AEON. AEON will represent awards using ontology developed for that purpose.
* AEON is a BFO-based ontology that recognizes roles, processes, and process outputs. So, for example, a person might have the role attendee in an event. A person might have a chair role in an organizing committee associated with the event.
* An event defined by this ontology produces outputs that are information artifacts (<http://www.obofoundry.org/ontology/iao.html>). These outputs can be referenced, but they are not in the scope of this ontology.
* An academic event has one or more topics. Defining topics is outside the scope of this ontology. Existing topic vocabularies can be used with AEON.
* Events are defined in a general manner with sub-events (occurrent parts) that are themselves events. This allows for the representation of conferences that have workshops with their own organizing committees, for example.
* Events without much structure are often called “meetings.”