Invitation letters for the Archaeometry Special Issue

2023-04-29

* There are 13 invited papers

1 ) to: [erc62@cam.ac.uk](mailto:erc62@cam.ac.uk)

Dear Dr Enrico Crema,

We would like to personally invite you to contribute to an (online only) Archaeometry Special Issue on the subject of ‘*Chronology: formal methods and research software*’. We were very intrigued by your recent researches on **temporal uncertainty**. We were wondering if you would consider a paper on this topic in the context of modelling chronology, in this or other contexts? If you are interested in taking up this invitation, please **let us know by the 2023-06-21**.

Archaeology is centered around time and its analysis, but due to the wide range of features dispersed in time and space, contextual chronological assessments are created using various tools, languages, and techniques. This results in numerous frameworks depending on specialties, with different approaches for absolute or relative chronology, Prehistory or recent periods, laboratory techniques or cultural approaches, deterministic or statistical methods, and more. The aim of this Archaeometry Special Issue is to review the current practices of different specialities in research software and formal methods for chronological modelling, and to align archaeo-chronological data according to FAIR principles and semantic web, regardless of their precision. To accomplish this, the issue proposes an innovative collaboration on the GitHub platform, allowing authors to share interoperable forms of their time data that comply with open science standards. The digital form of the issue will enable linking research articles and data samples. The GitHub platform is currently under construction and can be viewed here: <https://github.com/historical-time/caa23/tree/main/archaeometry-si>.

We will invite a series of papers to contribute to various aspects of chronological modelling, including open-source software research, formal methods, and archaeometric dating, Bayesian analysis, stratigraphic analysis, seriation, and temporal logics. The papers will also explore the reusability, scalability, and alignment of chronologies, incorporating FAIR and isotopic standards, cross-dating, high-resolution downscaling, and low-resolution upscaling of temporal data on a common timeline or multi-resolution alignment. The management of uncertainty and fuzziness will also be examined. It is important to note that this Special Issue is not intended to be a collection of case studies. Instead, it seeks to gather formal perspectives on chronological modelling, review recent methods and avenues of development, and focus on building interoperable chronologies over the long term and at large geographical scales.

The final **manuscript submission deadline is 2023-10-18**.

We hope you will consider contributing to this edition.

Yours sincerely,

2 ) to: [christopher.ramsey@arch.ox.ac.uk](mailto:christopher.ramsey@arch.ox.ac.uk)

Dear Pr Christopher Bronk Ramsey,

We would like to personally invite you to contribute to an (online only) Archaeometry Special Issue on the subject of ‘*Chronology: formal methods and research software*’. We were very intrigued by your recent researches on **open access to chronological data**, **cross-dating and multi-resolution chronologies alignment**, or **radiocarbon dating**. We were wondering if you would consider a paper on this topic in the context of modelling chronology, in this or other contexts? If you are interested in taking up this invitation, please **let us know by the 2023-06-21**.

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3 ) to: <[martin.hinz@iaw.unibe.ch](mailto:martin.hinz@iaw.unibe.ch), [joseph.roe@iaw.unibe.ch](mailto:joseph.roe@iaw.unibe.ch)>

Dear Dr Martin Hinz, Dr Joe Roe,

We would like to personally invite you to contribute to an (online only) Archaeometry Special Issue on the subject of ‘*Chronology: formal methods and research software*’. We were very intrigued by your recent work for the **XRONOS project, open access to chronological data, cross-dating and alignment of multi-resolution chronologies**. We were wondering if you would consider a paper on this topic in the context of modelling chronology, in this or other contexts? If you are interested in taking up this invitation, please **let us know by the 2023-06-21**.

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4 ) to:

Dear Dr Stephen Stead,

We would like to personally invite you to contribute to an (online only) Archaeometry Special Issue on the subject of ‘*Chronology: formal methods and research software*’. We were very intrigued by your recent work on the **CIDOC-CRM and CRMarchaeo**. We were wondering if you would consider a paper on this topic in the context of modelling chronology, in this or other contexts? If you are interested in taking up this invitation, please **let us know by the 2023-06-21**.

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5 ) to: <[Keith.May@historicengland.org.uk](mailto:Keith.May@historicengland.org.uk), [james.s.taylor@york.ac.uk](mailto:james.s.taylor@york.ac.uk)>

Dear Dr Keith May, Dr James Taylor,

We would like to personally invite you to contribute to an (online only) Archaeometry Special Issue on the subject of ‘*Chronology: formal methods and research software*’. We were very intrigued by your recent communication at the CAA23 in Amsterdam, and your work on ‘The Matrix’ particularly its FAIRability. We were wondering if you would consider a paper on this topic in the context of modelling chronology, in this or other contexts? If you are interested in taking up this invitation, please **let us know by the 2023-06-21**.

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Yours sincerely,

6 ) to: [wolfgang.schmidle@dainst.de](mailto:wolfgang.schmidle@dainst.de)

Dear Dr Wolfgang Schmidle,

We would like to personally invite you to contribute to an (online only) Archaeometry Special Issue on the subject of ‘*Chronology: formal methods and research software*’. We were very intrigued by your recent communication at the CAA23 in Amsterdam, and your work on the **LOD gazetteer of cultural periods ChronOntology**. We were wondering if you would consider a paper on this topic in the context of modelling chronology, in this or other contexts? If you are interested in taking up this invitation, please **let us know by the 2023-06-21**.

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7 ) to: <[ryanshaw@unc.edu](mailto:ryanshaw@unc.edu), [arabinow@utexas.edu](mailto:arabinow@utexas.edu)>

Dear Pr Ryan Shaw, Pr Adam Rabinowitz,

We would like to personally invite you to contribute to an (online only) Archaeometry Special Issue on the subject of ‘*Chronology: formal methods and research software*’. We were very intrigued by your recent communication at the CAA23 in Amsterdam, and your work on the **LOD gazetteer of cultural periods PeriodO**. We were wondering if you would consider a paper on this topic in the context of modelling chronology, in this or other contexts? If you are interested in taking up this invitation, please **let us know by the 2023-06-21**.

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8 ) to:

Dear Dr Pierre Petrequin,

We would like to personally invite you to contribute to an (online only) Archaeometry Special Issue on the subject of ‘*Chronology: formal methods and research software*’. We were very intrigued by your interdisciplinary work on archaeology, anthropology and how material culture variability (e.g. pottery) percieved in a high precision dating context (e.g, Chalain, *chaîne opératoire*) can be compared and integrated to other and looser chronologies. We were wondering if you would consider a paper on this topic in the context of modelling chronology, in this or other contexts? If you are interested in taking up this invitation, please **let us know by the 2023-06-21**.

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Yours sincerely,

9 ) to: [Bruno.Desachy@univ-paris1.fr](mailto:Bruno.Desachy@univ-paris1.fr)

Dear Dr Bruno Desachy,

We would like to personally invite you to contribute to an (online only) Archaeometry Special Issue on the subject of ‘*Chronology: formal methods and research software*’. We were very intrigued by your expertise in stratigraphy. We would be grateful if you could provide an overview (news, trends and perspectives) of existing projects and software on this subject, whether dedicated (*The Stratifier*, [Matrix project](https://stratigraphic.github.io/matrix/), [Extended Matrix](http://osiris.itabc.cnr.it/extendedmatrix/), etc.) or integrated into broader information platforms ([Syslat](https://syslat.hypotheses.org/), [Intrasis](https://www.intrasis.com/), etc.). We were wondering if you would consider a paper on this topic in the context of modelling chronology, in this or other contexts? If you are interested in taking up this invitation, please **let us know by the 2023-06-21**.

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10 ) to: [clemens\_schmid@eva.mpg.de](mailto:clemens_schmid@eva.mpg.de)

Dear Clemens Schmid,

We would like to personally invite you to contribute to an (online only) Archaeometry Special Issue on the subject of ‘*Chronology: formal methods and research software*’. We were very intrigued by your expertise on visual semiotics for multi-paradigm and multi-scale changes (cultural periods, radiocarbon dating, genetic/cultural drifts, etc.) using graph drawing (split graphs, phylogenetic trees, etc.) or any formal representations (temporal series, Summed Probability Densities, etc.). We were wondering if you would consider a paper on this topic in the context of modelling chronology, in this or other contexts? If you are interested in taking up this invitation, please **let us know by the 2023-06-21**.

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11 ) to: <[clipo@binghamton.edu](mailto:clipo@binghamton.edu), [mark@madsenlab.org](mailto:mark@madsenlab.org)>

Dear Pr Carl P. Lipo, Dr Mark E. Madsen,

We would like to personally invite you to contribute to an (online only) Archaeometry Special Issue on the subject of ‘*Chronology: formal methods and research software*’. We were very intrigued by your recent work on **cultural transmission** and **phylogenetic approaches**. We were wondering if you would consider a paper on this topic in the context of modelling chronology, in this or other contexts? If you are interested in taking up this invitation, please **let us know by the 2023-06-21**.

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12 ) to: <[bcmoody1@sheffield.ac.uk](mailto:bcmoody1@sheffield.ac.uk), [c.e.buck@sheffield.ac.uk](mailto:c.e.buck@sheffield.ac.uk), [Keith.May@historicengland.org.uk](mailto:Keith.May@historicengland.org.uk), [tsd@tsdye.online](mailto:tsd@tsdye.online)>

Dear Bryony Moody, Pr Caitlin E Buck, Dr Keith May, Pr Thomas Dye,

We would like to personally invite you to contribute to an (online only) Archaeometry Special Issue on the subject of ‘*Chronology: formal methods and research software*’. We were very intrigued by your recent communication at the CAA23 in Amsterdam: *Automating chronology construction and archiving (FAIR)ly along the way*. We were wondering if you would consider a paper on this topic in the context of modelling chronology, in this or other contexts? If you are interested in taking up this invitation, please **let us know by the 2023-06-21**.

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13 ) to: <[florian.thiery@rgzm.de](mailto:florian.thiery@rgzm.de), [allard.mees@rgzm.de](mailto:allard.mees@rgzm.de)>

Dear Dr Florian Thiery, Dr Allard Mees,

We would like to personally invite you to contribute to an (online only) Archaeometry Special Issue on the subject of ‘*Chronology: formal methods and research software*’. We were very intrigued by your work on **Linked Open Temporal Data (LODT)**. We were wondering if you would consider a paper on this topic in the context of modelling chronology, in this or other contexts? If you are interested in taking up this invitation, please **let us know by the 2023-06-21**.

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