Advances in Computational Archaeology

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Computational Archaeology forms an important interface between archaeology and computer science. It deals with the structure, representation, and analysis of archaeological data, the description and interpretation of patterns and processes, and the development and testing of mathematical-statistical methods for knowledge acquisition in archaeology. Furthermore, it is concerned with the development of new tools and the use of established software in archaeological research and teaching, as well as public work, monument preservation and museums.

While a lot of computer applications have been introduced and established in the field of archaeology over the recent decades, the potential is far from exhausted. Computational archaeology, as the discipline concerned with the solution of archaeological problems and questions with methodologies of mathematics and computer sciences, is a quickly developing field. Focusing on key aspects of computational archaeology, this session invites papers dealing with topics such as:

- advanced statistics and spatial analysis in archaeology
- scale-related complexity theory
- process-based modelling and simulation models
- agent-based modelling
- artificial intelligence applications
- computational reproducibility of archaeological research

Contributions and perspectives are welcome, and may include the topics listed above or further improve established practice and processes.