



DAT@MI

It's all a matter of time

CONVEGNO TEMATICO

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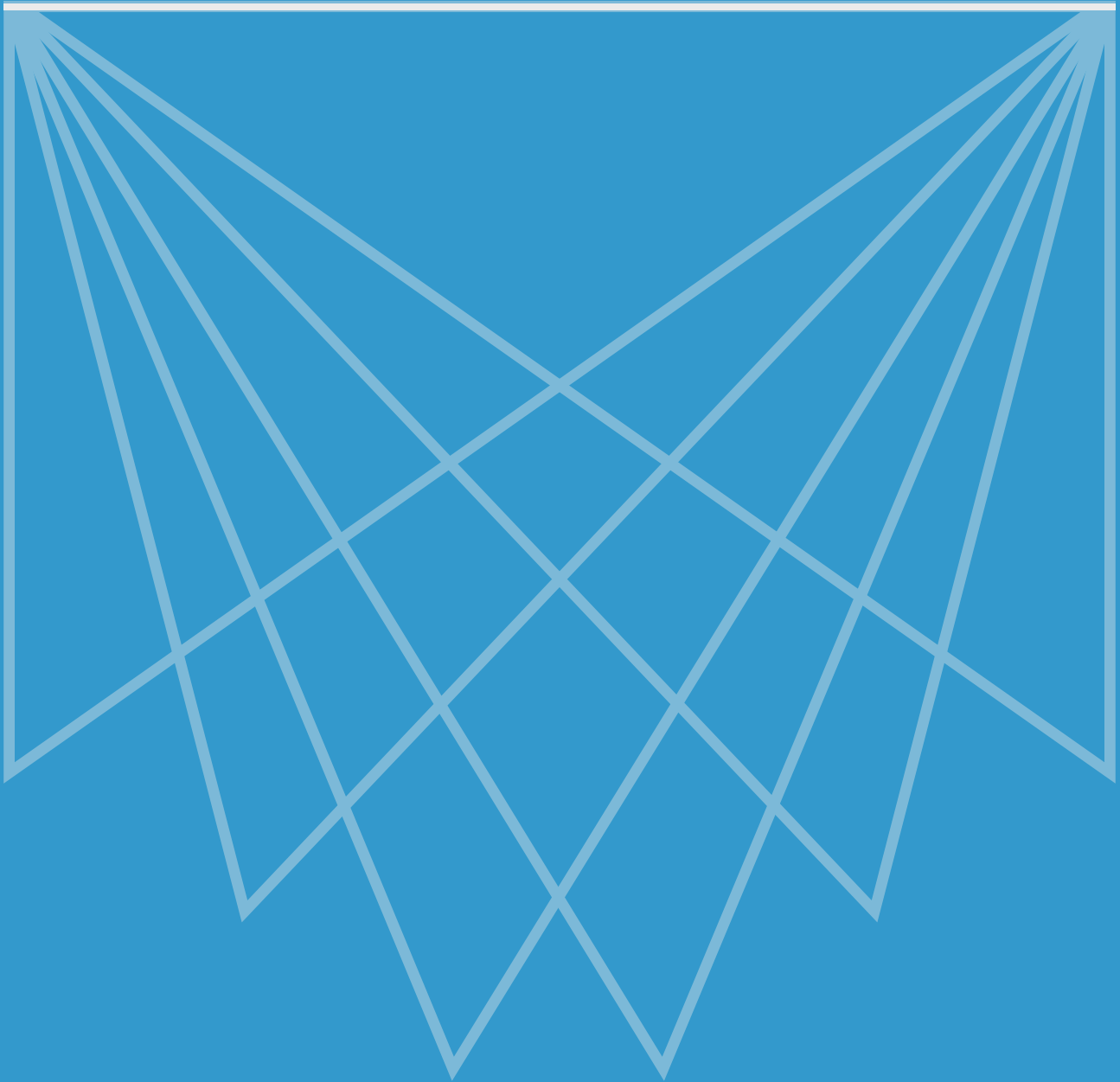
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DATAZIONE ASSOLUTA E RELATIVA



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CASTLES Project: a multidisciplinary study on the chronological transformation of the Medieval Castles in Italy

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In the present paper we present the PRIN 2020 CASTLES Project, dedicated to the study of castles in medieval Italy. It focuses primarily on the chronology of their formation and of their transformations, a key theme within broader European historiographical research. The archaeometric analysis concerned specifically the mortars used in the building of these sites and charcoal founded in this samples.

The study of medieval castles is a key theme within European historical research, one that has been tackled extensively, but which still retains numerous open questions. In Italy, recent work on the subject has greatly contributed to a sharpening of these questions, in particular those pertaining to the chronology of the transformations of castles. Between the second half of the 11th century and the end of the 12th, in fact, castles underwent a significant material shift, transforming from largely wooden palisades to durable stone fortifications featuring aristocratic residences and enclosed castral settlements; a shift connected with a transformation of practices of power in the countryside, but also with a reconfiguration of rural social fabric. The precise timings and the rhythms of these transformations, however, remain difficult to discern within the broader period in question. The aim of this project is thus sharpening these chronologies, through the development and the application of a novel research strategy, not previously applied to an Italian context in a systematic manner until now: this is a crucial chronological datum because it can change the way we understand the dynamics of transformation of social power linked to the rise of seigneurie in Italian countryside.

The uniqueness and originality of this project rests on four key aspects: its multidisciplinary approach; the high number of mortar samples that will be analysed, selected from a vast geographical area; the linking of these analyses to historiographical themes of crucial significance; and the creation of a dating protocol which can be exported and applied to other contexts, thanks to the elaboration of models of advanced statistical analysis to process the multidisciplinary data acquired.

The focus of the multidisciplinary research will be on Tuscany, as one of the best-studied regions of Italy. The acquired data and the new investigative protocol will be then compared and tested against a sample of selected castles from Piedmont and Liguria.

The apparent simplicity of the project's goals disguises a significant degree of complexity. There are a series of methodological challenges that need to be faced and conditions that need to be met to ensure the feasibility and the success of the project. On one hand, the samples need to be selected from areas that have previously been subject of ample and high-quality research and which can in turn provide a solid foundation of knowledge to build on, in both historical and archaeo-architectural terms. A preliminary mortar characterization provides crucial information about the nature of the materials, including the type of binder, the presence of lumps and charcoal, the nature of the aggregate, and any additives. This information is mandatory for the selection of a datable fraction.

On the other hand, the archaeometric analyses must be based on a significant level of experience in this field of research, as they will require the testing of new analytic protocols (radiocarbon mortar dating and mortar characterization) to counter the problem of the calibration curve for ¹⁴C dating (which, at present, does not allow for narrow calendar age ranges for the twelfth century).

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