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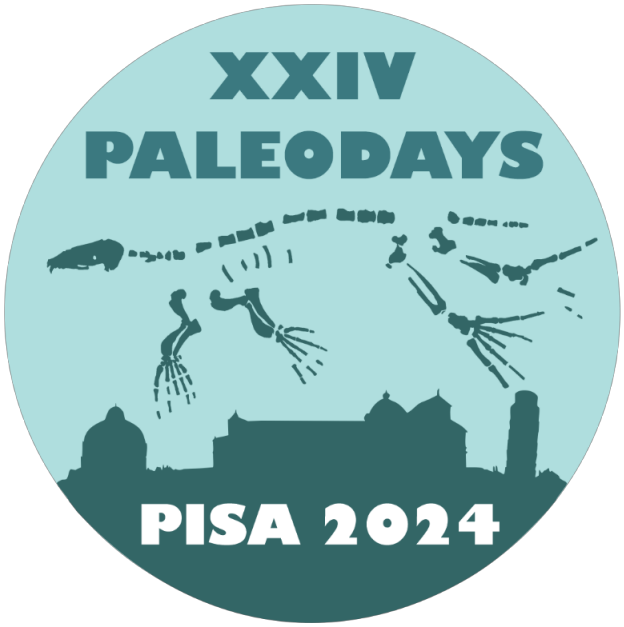

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ABSTRACT BOOK

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The enigmatic African wolf (*Canis lupaster*): insights from morphological and molecular analyses

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Canis lupaster, commonly known as the African wolf or the African golden wolf (ex. *Canis anthus*), is a medium-sized canid with wolf-like characteristics that occurs at present in central and northern Africa. Historically, some scholars considered it as a subspecies of the Eurasian *Canis aureus* due to phenotypic similarities. However, recent phylogenetic studies based on both mitochondrial and nuclear DNA have demonstrated that the African wolf is more closely related to *Canis lupus* than to *C. aureus*, thus supporting the validity of *C. lupaster* as a distinct species.

During paleontological excavations conducted by the Tanzanian Human Origins Research (THOR) team at Geolocality 83 in Olduvai Gorge between 2018 and 2022, a new vertebrate assemblage was discovered. This assemblage includes some exceptionally preserved mammalian fossils, among which three nearly complete canid skeletons stand out, showing striking morphological similarities to extant *C. lupaster*. Radiocarbon dating on ostrich eggshells supports an age of approximately 38 to 33 cal^{14}C ka for the paleontological assemblage, indicating that it is one of the few of Late Pleistocene age at Olduvai as well as in the whole of Eastern Africa.

The discovery of these complete skeletons from Olduvai represents the first unequivocal report of fossil African wolf from the continent, although some historical reports of *C. aureus* might have been misinterpreted and could rather represent *C. lupaster*. In this study, we present a morphological and morphometrical characterization of *C. lupaster* and its comparison with other African dogs. In addition to ongoing molecular (ancient DNA) analysis, this project aims to further refine our knowledge on the anatomy, variation, systematics, and phylogenetic relationships of this species.

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