

International Seminar on Paleontology, Evolution, Paleoecosystems and Paleoprimatology Room 410, build. B35 (3rd floor, northern wing)

Friday 27th January 2023 – 14h00

Preservation and function of lithic tools from Member F of the Shungura Formation (Lower Omo Valley, Ethiopia)

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This work focused on understanding the functional needs of the hominins who produced the stone tools during the deposition of Member F (2.32 Ma - 2.27 Ma) in the Shungura Formation. Site scarcity and preservation of archaeological material are limiting factors in the functional study of stone industries older than 2 Ma. The archeological occurrences in Member F have a precise chronological framework, a detailed stratigraphy of successive fluviatile deposits, and artefacts produced from quartz pebbles highly resistant to weathering.

The study of the archeological material was preceded by building an experimental reference frame functional that is both and taphonomic. This step proved to be fundamental for the understanding of the alterations specific to the depositional environments prior to the functional study of these artifacts in very ancient contexts. The results obtained allow a better understanding of the subsistence activities of stone knapping hominins living in the lower Omo valley 2.3 million years ago.



Aline Galland completed her PhD on the use of Oldoway stone tools from the Shungura Formation in 2022 at the University of Bordeaux. Her pioneering work provides a new approach to the use of quartz by the earliest stone tool makers. She has participated in several field missions of the Omo Group Research Expedition in Ethiopia and plays an important role in the interdisciplinary developments of this research program.





