

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

Thursday 15<sup>th</sup> December 2022 – 14h45

## Mid-Pliocene hominin diversity: the fossil evidence from Woranso-Mille (Central Afar, Ethiopia) and why it matters

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Fossil discoveries in the last three decades have significantly increased and substantially enhanced our understanding of human evolution during the Pliocene. Some of the discoveries from sites that were identified merely two decades ago have been redefining our understanding of the tempo and mode of human evolution during the Plio-Pleistocene. Woranso-Mille, located in the northwestern part of the Main Ethiopian Rift, is one of the newer sites and it has already become a significant mid-Late Pliocene paleoanthropological site in Africa. Detailed studies of hominin fossils recovered from the site have thus far shown the presence of multiple hominin species

between 3.5 Ma and 3.3 Ma and provided clear evidence for the co-existence of these hominins in close geographic proximity. Also, in 2019, the site yielded the first complete cranium of *Australopithecus anamensis*, dated to 3.8 Ma, and showed that this species overlapped with its putative descendant *Australopithecus afarensis* for at least 100,000 years, challenging previous consensus of linear evolution. This presentation highlights major hominin fossil discoveries from Woranso-Mille, their taxonomy and their significance in human evolutionary studies; addresses how two or more related hominin species might have managed to co-exist at Woranso-Mille—at times in close geographic proximity—and not at other nearby sites; and how hominin discoveries from Woranso-Mille could shed light on the origin of the genus *Homo*.



**Yohannes Haile-Selassie** is Virginia M. Ullman Professor of Natural History and the Environment in the School of Human Evolution and Social Change and Director of the Institute of Human Origins at ASU. His research interest is understanding the paleobiology and paleoecology of early human ancestors based on the fossil record. He has made fossil discoveries that are significant in human origins research and leads an international multidisciplinary team that conducts fieldwork in the Afar Region of Ethiopia.





