THE FOSSIL WEEK

ABSTRACT BOOK



5™ INTERNATIONAL PALAEONTOLOGICAL CONGRESS



From July 9th to 13th, 2018 France



Bolt's Farm Cave System (Cradle of Humankind-South Africa) from 1936 to 2018

Nonhlanhla Vilakazi*^{+ 1}, Lazarus Kgasi², Dominique Gommery^{1,2,3}, Frank Sénégas^{1,2,3}, James Brink^{4,5} Francis Thackeray⁶, Brian Kuhn^{7,8}

¹ University of South Africa (UNISA) – Department of Anthropology and Archaeology Pretoria 0002, South Africa ² Plio-Pleistocene Palaeontology Section, Ditsong National Museum of Natural History – Pretoria, South Africa ³ CR2P (MNHN-SU-CNRS), Paris - France

⁴ University of the Free State [South Africa] – Bloemfontein, South Africa

⁵ Florisbad Quaternary Research Department, National Museum – P.O. Box 266 Bloemfontein, South Africa

⁶ University of the Witwatersrand (WITS) – Private Bag 3 2050 WITS Johannesburg, South Africa

⁷ Department of Geology, University of Johannesburg (UJ) – Auckland Park 2006 South Africa

⁸ Centre for Anthropological Research (CfAR), University of Johannesburg (UJ) – Johannesburg, South Africa

The Cradle of Humankind (declared a World Heritage Site by UNESCO in 1999) includes more than 30 fossiliferous Plio-Pleistocene sites. The first fossils were discovered at the end of the nineteenth century. The scientific research started early in 1936 with one of the most prominent pioneers in palaeontology, Robert Broom (1866-1951), discovering some fossil baboon remains at Sterkfontein in collaboration with G.W.H. Schepers and H. le Riche, and later in the same year (1936), also the first remains of australopithecines at Sterkfontein. During the 1936 expedition, Broom also discovered the first fossils at Bolt's Farm Cave System (BFCS). Until his death, he would return occasionally to BFCS and find a few fossils which he published as type specimens. When Broom wrote a catalogue for the fossils from BFCS, the information about the material was usually insufficient. During the 1947-1948 expedition, Camp (1948) established the first map of the fossiliferous area but exported most of the material to the USA. From 1980 to 2006, a few occasional collections were undertaken. In 2006 the research at BFCS, led by a French-South African team, obtained more results. New deposits have been discovered since the first excavation in 2011. This has led to Camp's map of 1948 being revised and now regularly updated. This new team practises a multidisciplinary approach as it studies not only fossils but also the geological deposits, geochronology and diagenesis. The method of preparation of fossils and of the breccia has developed since 1936, especially for the BFCS material. Acid preparation is preferred and a new laboratory was built and inaugurated at the Ditsong National Museum of Natural History (DNMNH) in 2010. This method is more appropriate to prepare very fragile fossils, particularly the microfauna, and this will help in shedding more light on the age of the deposit as well as on the palaeobiodiversity and palaeo-environment.



^{*} Speaker

[†] Corresponding author: Nonny.Vilakazi@gmail.com