



## **Outline of the Little Dome C deep drilling operation**

Frank Wilhelms (1,2), Trevor James Popp (3), Olivier Alemany (4), Steffen Bo Hansen (3), Dorte Dahl-Jensen (3), Dan Ashurst (5), Benjamin Broy (1), Andreas Frenzel (1), Jens Christian Hillerup (3), Matthias Hüther (1), Eric Lefebvre (4), Karl-Emil Nielsen (3), Luc Piard (4), Philippe Possenti (4), Julius Rix (5), Jakob Schwander (6), Svenja Schiwiek (1), Jan Tell (1), Grégory Teste (4), Dennis Westphal Wistisen (3), and the Beyond EPICA – Oldest Ice drilling group

(1) Alfred-Wegener-Institut Helmholtz-Zentrum für Polar- und Meeresforschung, Bremerhaven, Germany, (2) GZG Abt. Kristallographie, Universität Göttingen, Göttingen, Germany, (3) Niels Bohr Institute, Centre for Ice and Climate, Copenhagen, Denmark, (4) Univ. Grenoble Alpes, CNRS, IRD, IGE, Grenoble, France, (5) British Antarctic Survey, Cambridge, United Kingdom, (6) Universität Bern, Institute of Physics, Bern, Switzerland

The European consortium Beyond EPICA – Oldest Ice and its international partners from Australia, US and Japan conducted extensive pre-site surveys in the vicinities of Dome C (DC) and Dome F for the identification of a suitable drilling site in response to the IPICS oldest ice challenge. To our present knowledge we envisage a suitable drilling site in the Little Dome C (LDC) region about 50 km Southwest of DC.

Presently we plan the drilling operation at this site in response for a Horizon 2020 EU call for a 1.5 million year old ice-core from East Antarctica. We will outline our state of the planning for the implementation of the deep ice coring operation being based on the deep drilling equipment that has been used for the NorthGRIP, EPICA, NEEM and EastGRIP deep drilling operations.