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THE FIRST CAMPAIGN OF THE BRAIN EXPERIMENT IN DOME-C

SFM Masi[1], PAM de Bernardis[1], C Giordano[1], F Nati[1], F Piacentini[1], G Polenta[1], M Gervasi[4], G Sironi[4], A Tartari[4], M Zannoni[4], SE Peterzen[1], J Bartlett[2], C Dufour[2], E Breelle[2], Y Giraud-Heraud[2], M Piat[2], C Rosset[2], M Giard[5], R Pons[5], B Maffei[6], PAR Ade[6], P Mauskopf[6], L Piccirillo[6], G Pisano[6], G Savini[6], A Orlando[6]

[1]Dept. of Phys.Univ.La Sapienza, Rome, Italy, [2]Cosmology Group College de France, Paris, France, [3]ISTARS (ASI), Pagosa Springs, United States, [4]Dept. of Phys. Univ. La Bicocca, Milan, Italy, [5]CESR, Toulouse, France, [6]Dept. of Phys. and Astronomy, Cardiff, United Kingdom

The BRAIN experiment is based on a bolometric interferometer which will be installed at Dome-C to measure with high precision the B-modes polarization of the Cosmic Microwave Background and the diffuse interstellar emission. We report results from the first campaign we have carried out this year at Dome-C. The goal of this campaign was to install the experiment and to test a cryogenic system able to operate automatically during the Antarctic winter. With this system we have also carried out a measurement of the Stokes parameters I,Q,U,V of atmospheric emission at 145 GHz.