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**An overview of Experimental Condensed Matter Physics in Argentina by 2014, and Oxides for Non Volatile Memory Devices: The MeMOSat Project**  
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In the first part of my talk, I will describe the status of the experimental research in Condensed Matter Physics in Argentina, biased towards developments related to micro and nanotechnology. In the second part, I will describe the MeMOSat Project, a consortium aimed at producing non-volatile memory devices to work in aggressive environments, like those found in the aerospace and nuclear industries. Our devices rely on the Resistive Switching mechanism, which produces a permanent but reversible change in the electrical resistance across a metal-insulator-metal structure by means of a pulsed protocol of electrical stimuli. Our project is devoted to the study of Memory Mechanisms in Oxides (MeMO) in order to establish a technological platform that tests the Resistive RAM (ReRAM) technology for aerospace applications. A review of MeMOSat's activities is presented, covering the initial Proof of Concept in ceramic millimeter sized samples; the study of different oxide-metal couples including (LaPr)<sub>2/3</sub>Ca<sub>1/3</sub>MnO, La<sub>2/3</sub>Ca<sub>1/3</sub>MnO<sub>3</sub>, YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7</sub>, TiO<sub>2</sub>, HfO<sub>2</sub>, MgO and CuO; and recent miniaturized arrays of micrometer sized devices controlled by in-house designed electronics, which were launched with the BugSat01 satellite in June2014 by the argentinian company Satellogic.