

ΤΜΗΜΑ ΦΥΣΙΚΗΣ

## ΓΕΝΙΚΟ ΣΕΜΙΝΑΡΙΟ ΤΜΗΜΑΤΟΣ ΦΥΣΙΚΗΣ

## PHYSICS COLLOQUIUM

Thursday, 3 May 2012 17:00 -18:00 3<sup>rd</sup> Floor Seminar Room

"Little Bang at Big Collider': Results with heavy ions from the LHC"

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## **Abstract**

At the end of 2010, the CERN Large Hadron Collider started operation with heavy ion beams, Lead on Lead at a centre-of-mass energy of 2.76 TeV/nucleon, opening a new era in ultra-relativistic heavy ion physics at energies exceeding previous accelerators by more than an order of magnitude. This talk summarizes the results from the first year of ion physics at the LHC obtained by the three experiments participating in the ion program, i.e. ALICE, ATLAS, and CMS; comparing them where appropriate with data from lower energies (RHIC and SPS), and focusing on areas where significant progress has been made in the study of hot and dense matter, the Quark Gluon Plasma.