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Decoding new physics at 1fb^-1 LHC with flavour and CP observables

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If the SUSY-breaking scale is low, as preferred for a solution of the hierarchy problem, then light, coloured SUSY particles may be copiously produced in the initial LHC run at 7 TeV; in the most favourable scenarios the squark and gluino masses may even be measured to a respectable accuracy. I show how this early LHC data can be combined with existing measurements in the flavour sector to constrain the remaining SUSY spectrum and make predictions for design-energy LHC running. I also discuss the prospects for future flavour- and CP-violation experiments in these early-discovery scenarios, in the context of both Minimal Flavour Violation and Flavour Symmetry models.

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