



On the 4th of July both of ATLAS and CMS, the two multi-purpose detectors at the LHC have announced that they have established, with a very high degree of confidence, the existence of a resonance at the LHC. This is most probably the long sought after Higgs. The physics of the Higgs is the topic of many researchers at LAPTh (See [here](#) a list of publications by LAPTh physicists with Higgs in the title..).

In the SM, Standard Model, the mechanism responsible for giving mass to all known particles predicts the existence of a scalar, spin-0, particle: the Higgs. This discovery paves the way to many exciting studies. The discovery may even be the first sign for New Physics. If this particle is confirmed to be indeed the Higgs, it will be the only particle we know of that is a fundamental scalar. Other scalars we know are not fundamental but composed of yet more elementary particles.