



## Poster session 3 – Wednesday 6 July

### P3.087 **Leptonic CP violation and leptogenesis**

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The origin of the asymmetry between matter and anti-matter of the Universe remains one of the most important open questions in particle physics and cosmology. Taking account of the progress made in the understanding of flavour effects in leptogenesis, we investigate the scenario that the CP-violation necessary to generate the observed baryon asymmetry can be attributed to CP-violation in the lepton sector. In particular, we focus on the possibility that the observed baryon asymmetry derives from the CP-violating phase,  $\delta_{CP}$ , which is accessible via neutrino oscillation experiments. Assuming the scale of leptogenesis occurs at a temperature such that there are two distinct lepton flavours, we perform a detailed study of normal and inverted mass hierarchy and the study range of CP-violating  $\delta$  that can produce the baryon asymmetry.