

# HAMILTONIAN EVOLUTION OF $SU(3)$ STRUCTURES

**Simon Salamon**

*Kings College London, UK*

I shall survey the well-known relationship between half-flat structures on 6-manifolds  $M$  and metrics with holonomy  $G_2$  on  $M \times (a, b)$ , focussing on the case in which  $M = S^3 \times S^3$  with solutions invariant by  $SO(4)$ .