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### **The effect of nonlocal cellular interactions on pattern formation**

Cells interact with their local environment, and these interactions affect the proliferation, differentiation and movement of cells. While modelling these interactions is obviously important, doing so in a continuous model has proved difficult.

In this talk I will present a continuous partial differential equation model of a two population system, using integral terms to describe the effect of local environment on interacting cells. I will use this model to explore particular cellular interactions, and present the spatial patterning that can be obtained from such a system.