**MINI PROJECTS**

* A clear statement of the research objectives of the project.

There is a vast literature on the use of NK models in the field of Strategic Management (for an example, see Robertson and Caldart (2009) “The Dynamics of Strategy”, Oxford Press) that can be used as a platform to identify potential gaps where additional NK modelling and variations of NK modelling (e.g. NKC) can be useful.

NK models were conceived by Kauffman to model the ‘fitness’ of an organism as being dependent on the inter-relationship between different characteristics in genes. In Strategic management, these models have been employed to represent the interactions between firms that try to evolve in rugged landscapes. In the NK model, firms are characterised as vector of N bits. The value of each bit, 0 or 1, represents a decision made by the organization. The variable K is a measure of the degree of interdependence of organisation’s decisions. The value of K ranges between 0 and N-1. The number of choices is 2N. Therefore, a strategy is a combination of different choices between N and K.

My personal research in strategic management is in the area of competitive dynamics and resource-based view of the firm. Therefore, the student is expected to perform a literature review to identify the state-of-the-art in the area and then use one of the published models (or variations) to perform research in the area of evolutionary competitive dynamics.

* A discussion of why it is interesting.

There is a vast literature on the use of NK models in the field of Strategic Management (see Management Science) so the student may be interested in making a contribution to the area of evolution and business issues such as innovation, organisation design, etc. The student will select the area that is more interesting to him.

* A brief summary of the background to be assimilated and techniques required.

NK modelling…see Kauffam (1993) The origins of Order: self-organization and selection in evolution. Oxford University Press.

* A list of prospective deliverables.

A model with experiment data related to the validation of theories in strategic management (competitive dynamics).

* An indication of the relation to end/downstream users: who should benefit from this [line of] research?

I will benefit from this research and this research can be the start for the student to work in the area of business/strategic management.

* A brief outline of avenues for a follow-up PhD project.

Given the extensive research in strategic management using NK models and my actual research agenda in the area of competitive dynamics, the student can follow this project with a PhD. However, the topic will be defined after the student finishes the project