

## **TITOLO PROGETTO**

**ETOILE - Enhanced Technology for Open Intelligent Learning Environments** 

Linea finanziamento: VII FP

Area Scientifico Disciplinare: 15a Scienze e tecnologie per una societ dellinformazione e della

comunicazione

## **DOCENTE RESPONSABILE SCIENTIFICO: POLI Irene**

## **DATI FINANZIARI**

Costo Complessivo del Progetto	Finanziamento Complessivo Assegnato	Costo totale delle attività a Ca' Foscari	Assegnazione Complessiva a Ca' Foscari
599.000,00	599.000,00	0	0

INIZIO ATTIVITA' (previsione) 2011

FINE ATTIVITA' (previsione) 2014

## ABSTRACT PROGETTO

Complex systems science is highly interdisciplinary. The silo-based education provided by most universities creates scientists expert in one discipline but ignorant of most others. Most PhD programmes require students to learn key ideas from other disciplines relevant to their topic, but knowledge across the community is patchy. This includes basic social science and even the core disciplines of mathematics, statistics, physics and ICT. The Complex Systems Society (CSS, 2000+ members) has identified this as a major hindrance to the development of the science.

We will develop and use a remarkable new way of automatically creating educational resources. It is scalable so that the cost of educating large numbers of students is very low. It is adaptive to changes in the curriculum in fast-moving research fields creating new learning resources as new topics emerge, and it is adaptive to students by creating learning resource that reflects their personal styles of learning, background knowledge, and language. Étoile is a big step towards personalised learning.

The basic étoile concept is simple but a demonstrator is needed to show that the idea works in practice for real students working towards masters and doctoral degrees. We will provide an open source implementation for use by the CSS, and other organisations needing to disseminate new ideas quickly at low cost to a heterogeneous community.

Following proof of concept, the CSS will take étoile forward in its long term programme of professional training and recognition. Students with certificated mastery of the core curriculum will be highly attractive as post-docs. As mastery of the core curriculum becomes common communication in the research community will be much easier, there will be less duplication of effort and more cross-fertilization of ideas. Étoile can have big and long-lasting impact on the science of complex systems, and the method can be adopted by other fast-moving research communities.