# UNIVERSITÀ E ALTRI ISTITUTI DI ISTRUZIONE

### IMT ALTI STUDI LUCCA

## Avviso di indizione di sei procedure di valutazione comparativa a livello internazionale per la copertura di sei posizioni di Assistant Professor e Post-Doctoral Fellow.

Si rende noto che, con i Decreti Direttoriali n. DD 02520(181).VII.5.01.09.11, DD 02521(182).VII.5.01.09.11, DD 02522(183).VII.5.01.09.11, DD 02523(184).VII.5.01.09.11, DD 02524(185).VII.5.01.09.11, DD 02525(186).VII.5.01.09.11 presso la Scuola IMT Alti Studi, Lucca, istituto statale di istruzione universitaria di alta formazione dottorale con ordinamento speciale, sono state indette sei procedure di valutazione comparativa per posizioni da Assistant Professor e Post-Doctoral Fellow con le seguenti specifiche:

#### Assistant Professor in Statistical Physics - 1 posizione

FIELDS: Theory, applied mathematics, analysis and modeling of complex systems and applications of statistical physics and economics to social systems; graph theory and random structures and analysis and modeling of complex networks in social economic systems.

ACTIVITIES: Research, tutorship and mentoring of the Institute's Ph.D students, teaching and participation in the development of the research areas.

SPECIFIC REQUIREMENTS: Candidates must have an excellent record of high-impact international publications. Candidates should demonstrate enthusiasm for performing applied research in a interdisciplinary Research Unit.

REQUIREMENTS: A Ph.D in Physics, Mathematics or Information Sciences is preferable. Possession of an Undergraduate degree in fields related to the profile. Excellent knowledge of English, both written and spoken.

RESEARCH AREA: Economics and Institutional Change RESEARCH UNIT: AXES - Laboratory for the Analysis of compleX Economic Systems

Assistant Professor in Analysis, Control, and Optimization of complex dynamical systems - 1

#### posizione

FIELDS: Analysis, control, and optimization of complex dynamical systems. Research experience is expected in at least one of the following areas: Model predictive control, Dynamic optimization, Stochastic optimization, Control systems design based on optimization methods.

ACTIVITIES: Research, tutorship and mentoring of the Institute's Ph.D students, teaching and participation in the development of the research areas.

SPECIFIC REQUIREMENTS: Candidates must have an excellent record of high-impact international publications. Candidates should demonstrate enthusiasm for performing applied research in a interdisciplinary Research Unit.

A sound knowledge of control and optimization methods is required, and the successful candidate will be interested in both theoretical research and in applications to practical problems. Previous experience with applications of control/optimization to smart grids and energy markets is a plus, but candidates with experience in other application areas are welcome.

REQUIREMENTS: A Ph.D in engineering or mathematics with a focus on control or optimization is preferable. Possession of an undergraduate degree in fields related to the profile. Excellent knowledge of English, both written and spoken.

RESEARCH AREA: Computer Science and Applications

RESEARCH UNIT: DYSCO - Dynamical Systems, Control, and Optimization

#### Assistant Professor in Economics and Innovation Management - 1 posizione

FIELDS: Research within the field of Innovation and entrepreneurship, informed by organizational economics, and predominantly based on a unique collection of empirical datasets analyzed by means of state-of-the-art methods including micro-econometrics, content analysis, and the analysis of networks and complex systems.

ACTIVITIES: Research, tutorship and mentoring of the Institute's Ph.D students, teaching and participation in the development of the research areas.

SPECIFIC REQUIREMENTS: Candidates must have an excellent record of high-impact international publications. Candidates should demonstrate enthusiasm for performing applied research in a interdisciplinary Research Unit.

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Applicants should have a strong research potential in the area of innovation, and first-rate skills in empirical analysis, preferably micro-econometrics and content analysis of massive datasets. REQUIREMENTS: A PhD in Economics, Statistics or Computer Science is preferable. Possession of an

undergraduate degree in fields related to the profile. Excellent knowledge of English, both written and spoken.

RESEARCH AREA: Economics and Institutional Change

in the development of the research areas.

RESEARCH UNIT: LIME - Laboratory of Innovation Management and Economics

#### Assistant Professor in Modelling and Analysis of Concurrent Systems - 1 posizione

FIELDS: Foundations and formal specification of concurrent (distributed, mobile, autonomic) systems. Quantitative and qualitative modelling and analysis of concurrent systems and design and development of software tools to support their formal analysis. Applications to socio economic systems. ACTIVITIES: Research, tutorship and mentoring of the Institute's Ph.D students, teaching and participation

SPECIFIC REQUIREMENTS: Candidates must have an excellent record of high-impact international publications. Candidates should demonstrate enthusiasm for performing applied research in a interdisciplinary Research Unit.

They should have demonstrated ability in formal methods, in system modelling and in the development of software tools, as well as experience in participation in international projects.

REQUIREMENTS: A Ph.D. in Computer Science or Computer Engineering is preferable. Possession of an undergraduate degree in fields related to the profile. Excellent knowledge of English, both written and spoken.

RESEARCH AREA: Computer Science and Applications RESEARCH UNIT: SySMA - System Modelling and Analysis

#### Post-Doctoral Fellow in Art History: Images, Visions and Reactions – 1 posizione

FIELDS: Art History, Cognitive Psychology, Neuroesthetics, Aesthetics, Philosophy.

ACTIVITIES: Research, tutorship and mentoring of the Institute's Ph.D students, teaching and participation in the development of the research areas.

SPECIFIC REQUIREMENTS: A significant record of publications and research activity related to Art History, Modes of Vision and Aesthetics, a goal-oriented approach, the ability to interact with non-academic institutions or companies and the capacity to generate partnerships and external funding are highly appreciated.

REQUIREMENTS: A Ph.D in a related field with special emphasis on Art History and Cultural Heritage Possession is preferable. Possession of an undergraduate degree in fields related to the profile. Excellent knowledge of English, both written and spoken.

RESEARCH AREA: Economics and Institutional Change

RESEARCH UNIT: LYNX - Center for the interdisciplinary Analysis of Images. Objects, Spaces, Images: individual Experience and social Behaviors

#### Post-Doctoral Fellow in Art History: Images and Motion – 1 posizione

FIELDS: Art History, History of Cinema, Museology, Media Studies, History of science, Cognitive Psychology, Aesthetics, Philosophy.

ACTIVITIES: Research, tutorship and mentoring of the Institute's Ph.D students, teaching and participation in the development of the research areas.

SPECIFIC REQUIREMENTS: A significant record of publications and research activity related to Art, a goaloriented approach, the ability to interact with non-academic institutions or companies and the capacity to generate partnerships and external funding are highly appreciated.

FORMAL REQUIREMENTS: A Ph.D in a related field with special emphasis on Art History is preferable. Possession of an undergraduate degree in fields related to the profile. Excellent knowledge of English, both written and spoken. RESEARCH AREA: Economics and Institutional Change

RESEARCH UNIT: LYNX - Center for the interdisciplinary Analysis of Images. Objects, Spaces, Images: individual Experience and social Behaviors

I bandi di concorso con indicazione delle modalità di presentazione delle domande è pubblicato all'Albo Online della Scuola sul sito web all'indirizzo www.imtlucca.it.

Il termine di scadenza per la presentazione delle domande è il **31 ottobre 2011**.



