

## KNOWeSCAPE



## Money, Uncertainty and the Macroeconomy

Workshop

Jointly organized by

COST Action KNOWeSCAPE and Complex Systems Research Centre (CORE), NUI Galway

March 14-16, 2016

The financial meltdown of 2008 in the US stock markets and the subsequent protracted recession in the developed economies have accentuated the need to understand the implication of the dynamic interaction between the modern financial sector and the real economy. The mainstream approach in economics has turned out to be grossly inadequate, both at substantive, methodological levels, in providing an understanding of the current crisis.

There is a long-standing tradition in Classical Political Economy, which recognizes the central role of money in production and distribution of income in the economy. The modern proponents of this lineage have been advancing the frontiers by explicitly considering the endogenous nature of money in the context of modern financial sector and its implication for production and distribution of income.

At the same time, Physicists, Mathematicians and others have been exploring the dynamics of the modern financial sector and its impact on a systemic level using models from statistical mechanics, ecology/biology and information theory. Their work provides a way to break away from the tradition of viewing the economy as homogenous entity to a network of heterogeneous agents and entities.

The question then is how does this new knowledge helps to further our understanding on some of the classical questions such as the role of money in production of commodities and distribution of income? This short workshop seeks to bring together economists and noneconomists working on these questions for a dialogue on the conceptual, methodological, and applied issues related to the role of money in the wider economy.

Venue: CA110 (SAC) room, NUI Galway

For further information, contact:

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# **KNOWeSCAPE**



# Programme schedule

Monday,	14 <sup>th</sup>	March	2016

09:15 - Registration

09:30 - Welcome by Tom Boylan

Session 1	Interconnection, Information, and Concentration in Financial Networks	
09:50	Giulia Rotundo, Sapienza University of Rome, Italy Concentration in Financial markets	
10.40	<b>Tiziana Di Matteo</b> , Kings College London, UK Information filtering by means of network theory	
	11:30 Coffee break	
11:45	<b>Matthias Raddant</b> , Kiel Institute for the World Economy, Germany <i>Interconnections in the global financial market</i>	
12:35 Lunch		
Session 2	Income, wealth disparities and the economy	
13:45	Marcel Ausloos, Royal Netherlands Academy of Arts and Sciences, The Netherlands	
	Measuring wealth disparities and inequalities: The case of Italy	
14:25	Claudiu Herteliu, Bucharest University of Economic Studies, Romania Income inequalities among ethnic groups in Romania	
	15:05: Coffee break	
15:20	Markus Schneider, University of Denver, US Revisiting the thermal/super thermal distribution of income and the entropic evidence of multiple labour market segments	
16:00	Stefan Hutzler, Trinity College Dublin, Ireland On the relationship between income, fertility rates and democracy	



## **KNOWeSCAPE**



#### 16:40 **Open Discussion 1**

Economy as Network

Initiators: Matthias Raddant and Tiziana Di Matteo

## Tuesday, 15th March 2016

#### Session 3 Uncertainty and dynamics of financial markets

#### 09:30 **Gurjeet Dhesi**, London South Bank University, UK

Agent based model of the semi-closed stock market: Investigating price evolution, uncertainty and Aggregate demand and supply

#### 10:20 **Dany Lang**, L' Université Paris 13 & CNRS, France

Natural selection, swarm intelligence and market economies: an exploration within an SFC-AB model

11:00 Coffee break

#### 11:30 **Alexander Ganchev**, American University in Bulgaria, Bulgaria

About Holonomy and Arbitrage

#### 12:45 Lunch

#### **Session 4** Financial Sector and the Macroeconomy

14:00 **Alan Kirman,** Aix Marseille University/Ecole des Hautes Etudes en Sciences Sociales, France

Networks and Interaction: The Economy and the financial sector as a complex system

14:50 **Juergen Mimkes**, Universität Paderborn, Germany

Money and Uncertainty in Calculus based Economics

15:30 coffee break

#### 16:00 **Open discussion 2**

Complexity Science and Economics: Reflections on achievements and challenges

Initiator: Alan Kirman







## Wednesday, 16<sup>th</sup> March 2016

Session 5	Macroeconomy under financialisation
09:30	Sinéad Ashe, National University of Ireland, Galway, Ireland
	Asymmetric impact of monetary policy under financialisation
10:20	Srinivas Raghavendra, National University of Ireland, Galway, Ireland
	Money, Income distribution and Macroeconomic regimes under financialisation
	11:00 Coffee
Session 6	Risk, Rational choice and Market dynamics
11:20	Roy Cerqueti, University of Macerata, Italy
	Risk Measurement in a Network framework
12:00	Oleg Yordanov, Bulgarian Academy of Sciences, Bulgaria Weighting the rational choice vs. local group mood in market dynamics
	weighting the rational choice vs. local group mood in market dynamics
	12:45 Lunch
	End of meeting

Workshop sponsored by the second working group of

COST Action TD1210 KNOWeSCAPE and the Complex Systems Research Centre (CORE), NUI Galway

Proposed and organized by

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