



# Let ideas to grow: technology transfer from research labs to successful realities

*Torino - 7 July 2023*

## Objective

This workshop is structured in two panels dedicated to:

- how to develop your entrepreneurial idea from university spin off to a successful startup
- some examples of successful startups (problems encountered, the reasons of success)

The first panel will focus on how to develop and grow an entrepreneurship idea from university spin off to a successful reality. First we have presentations in which some important Italian supporters for entrepreneurship (such as: university incubator, the Italian Agency for Economic Development, the Agency for the Promotion of European Research, Competence Centers and venture capital) will illustrate how they can support an innovative startup and IEEE programs to support startups are also presented. After the short introductory presentations, a round table between all actors will answer questions from the moderator and the audience.

The second panel will present some examples of successful and innovative startups with discussion of best practices, problems encountered and solutions.

## Program

14:00 – 14:10 Welcome to participants

Tiziana Tambosso – IEEE Italy Section Entrepreneurship Committee

(<https://italy.ieeer8.org/ieee-italy-section-entrepreneurship-committee/>)

Marco D. Santambrogio – Politecnico di Milano & **NECSTLab**

(<https://www.deib.polimi.it/eng/deib-labs/details/23>)

## Panel 1: Entrepreneurship – how to develop your entrepreneurial idea

*Panel Chairs: Tiziana Tambosso & Marco D. Santambrogio*

14:10 – 14:25 **Vincenzo Piuri** - IEEE R8 Director

*IEEE programs to support entrepreneurships*

14:25 – 14:35 **Laura Prinzi** – PoliHub (<https://www.polihub.it/en/>) Innovation park and startup accelerator of Politecnico di Milano



*PoliHub strategy for supporting innovative startups*

- 14:35 – 14:45 **Massimo Calzoni** - Invitalia (National Agency for Inward Investment and Economic Development)  
<https://www.invitalia.it/eng>  
*Invitalia programs to support innovative startups*
- 14:45 – 14:55 **Valentina Fioroni** - APRE (Agency for the Promotion of European Research – <https://www.apre.it/en>)  
*Horizon Europe program to support SME, start-up, spin-off (EIC Accelerator)*
- 14:55 – 15:05 **Nicolò Sanarico** - Primo Ventures (<https://www.primo.vc/>)  
*A quick overview of the current status of the Italian startup & VC market*
- 15:05 – 15:15. **Leopoldo Angrisani** - CeSMA (<https://www.cesma.unina.it/>)  
*How Competence Centers can support and help grow startups*
- 15:15 – 16:00 Q&A & Round Table – *Moderator: Marco D. Santambrogio*

*COFFEE BREAK 16:00 – 16:30*

**Panel 2: Successful startups – how they succeed**

*Panel Chairs: Tiziana Tambosso and Mirko Coggi*

16:30– 16:35 Introduction

16:30– 16:45 **Marco D. Santambrogio** – Politecnico di Milano  
<https://www.deib.polimi.it/eng/deib-labs/details/23>  
*Leonardo the “Multimagineering” Project*

Some examples of successful startups – guidelines for success

16:50 – 17:00 **Sara Notargiacomo**, CBO – HUXelerate  
<https://huxelerate.it/>  
*Huxelerate: Bringing Software Performance Optimization Research into the Market*



- 17:00 – 17:10 **Guido Walter Di Donato**, CEO – GenoGra  
(<https://www.genogra.com/>)  
*GenoGra: Next-Generation Genome Analysis Pipeline*
- 17:10 – 17:20 **Bruno Vusini**, Managing Director – AMC Instruments  
([www.aemmeci.com](http://www.aemmeci.com))  
*AMC Instruments – from an idea to the market*
- 17:20 – 17:30 **Andrea Gulisano**, Chief Executive – Wave for Energy  
([www.waveforenergy.com](http://www.waveforenergy.com))
- 17:30 – 18:00 Q&A round table  
  
*Moderator: Mirko Coggi (Politecnico di Milano)*

See also: <https://entrepreneurship.ieee.org/>



## APPENDIX – abstracts- and short CVs of the speakers

### Vincenzo Piuri



**Title:** IEEE programs to support entrepreneurships

#### Abstract

The Talk will explain the Role of IEEE Entrepreneurship and how it applies the vision of Connecting tech entrepreneurs to an engineering-driven global Innovation network throughout the activities, programs. also explaining the opportunities for IEEE Entrepreneurs offered by the IEEE Entrepreneurship and IEEE Region 8 Entrepreneurship initiative

#### Short Biography

Vincenzo Piuri has received his Ph.D. in computer engineering at Polytechnic of Milan, Italy (1989). He is Full Professor in computer engineering at the University of Milan, Italy (since 2000) and has been Visiting Professor at the University of Texas at Austin, USA, and visiting researcher at George Mason University, USA.

His main research interests are: artificial intelligence, intelligent systems, signal/image processing, industrial and environmental applications, biometrics.

He is Fellow of the IEEE, Distinguished Scientist of ACM, and Senior Member of INNS. He is IEEE Region 8 Director (2023-24), and has been IEEE Vice President for Technical Activities (2015), IEEE Director, President of the IEEE Systems Council, President of the IEEE Computational Intelligence Society, Vice President for Education of the IEEE Biometrics Council. He has been Editor-in-Chief of the IEEE Systems Journal (2013-19).



## Laura Prinzi



**Title:** PoliHub strategy for supporting innovative startups

### Abstract

Startups are a major player in the economy and a critical factor in a country's ability to remain competitive in the international market. But what's behind real success? It's not just the legislative framework that matters - and it's not just a matter of talent, even if it's key to any startup's success. With a high level view of the challenges that startups need to face over time on their path to scale ups, we will look at how PoliHub is increasing the odds of success, through its methodologies, acceleration programs and collaboration with industrial partners.

### Short Biography

Laura Prinzi is currently Head of Business and Technical Partnership at Polihub, the accelerator of Politecnico di Milano focused on deep tech innovations. Her main objective is to create bridges between companies and startups in a perspective of Open Innovation, starting from the detection of corporate business needs to identifying the most suitable startups to respond, creating concrete development opportunities. Before joining PoliHub, she was CEO of B Heroes, accelerator and startup investor, active in Italy since 2017, focused on digital and early seed startups. Laura solves the issues of innovation from multiple points of view, not only through the lens of business, but above all as the ability and competence to embrace change in cognitive processes. Laura has a degree in contemporary history and, among other studies, an Executive MBA with honors from MIB - Trieste School of Management.



## Massimo Calzoni



**Title:** Invitalia programs to support innovative startups

### Abstract

Massimo Calzoni will talk about the main national incentives dedicated to innovative startups with a focus on Smart&Start Italia which has financed over 1,500 innovative companies, in sectors ranging from aerospace to e-commerce, from biotechnology to robotics, from the Internet of Things to IT and infrastructure, passing through web technology and many other sectors; Smart&Start Italia supports not only the birth but also the development of innovative projects with investments up to a maximum of 1.5 million euros. During the intervention, the characteristics of the incentive, the beneficiaries, the initiatives and eligible spending programs will be illustrated; the new opportunities for innovative female startups will also be told, thanks to the resources allocated by the PNRR and the possibility for all startups financed with Smart&Start Italia to convert part of the funding obtained into a non-repayable grant.

### Short Biography

Expert in the creation of micro, small, medium-sized enterprises and innovative startups; In Invitalia, the country's development agency, he holds the role of Promotion, Orientation and Services Manager for businesses, and also coordinates the Agency's networking activities with the main players in Italian innovation. His professional experience in the field of business creation began in 1996 in the Society for Youth Entrepreneurship (IG SpA); he has gained significant skills in the planning and evaluation of new entrepreneurial initiatives. Expert of the main public tools to support the birth, growth and development of businesses throughout the country. It has contributed and contributes to the transfer of knowledge relating to the national tools managed by Invitalia for the creation and development of businesses, also during the numerous public interventions in which the Agency has been called to participate.



## **Valentina Fioroni**



**Title:** Horizon Europe program to support SME, start-up, spin-off (EIC Accelerator)

### **Abstract**

The EIC Accelerator supports individual SMEs in particular startups and spinout companies to develop and scaleup high impact innovations with the potential to create new markets or disrupt existing ones. The EIC Accelerator focuses in particular on innovations, building on scientific discovery or technological breakthroughs where significant funding is needed over a long timeframe before returns can be generated. The EIC Accelerator supports companies where the EIC will act as a catalyst to crowd in other investors necessary for the scale up of the innovation. It supports the later stages of technology already tested and validated in laboratory and relevant environment.

### **Short Biography**

Valentina Fioroni graduated in Political Science, International Relations and subsequently attended a post-graduate master's degree in European project management for local economic development.

She has followed the Horizon 2020 programme since 2014 and has been appointed National Contact Point for SMEs, Legal and Financial and Space.

In Horizon Europe she has been appointed NCPs for European Innovation Council, Legal and Financial and Cluster 4.

She is the coordinator of Access2EIC project, the European network of EIC National Contact Point.



## Nicolò Sanarico



**Title:** A quick overview of the current status of the Italian startup & VC market

### **Abstract**

In this presentation, I will provide an overview of the current state of the Italian startup ecosystem, including key statistics from last year and the first half of 2023, the main actors involved in the ecosystem, and insights into fundraising. I will discuss the challenges and opportunities facing startups in Italy, and highlight some of the most promising areas of growth. Additionally, I will provide insights into the venture capital landscape in Italy, including trends in investment activity and the types of startups that are attracting the most investment.

### **Short Biography**

Nicolò is a general partner of Primo Digital, a seed-to-early stage VC fund managed by Primo Ventures SGR Spa. Nicolò is also the CTO at the firm. Before then, he was investment manager for Barcamper Ventures, a seed VC fund, dealflow manager at dpixel, and IT consultant at Moviri. Nicolò holds a degree in software engineering at the Politechnic of Milan, an MBA from the Oxford University, a MS in computer science from the University of Illinois at Chicago. Nicolò also authors The Week in Italian Startups, a weekly newsletter on the Italian startup ecosystem.





## Leopoldo Angrisani



**Title:** How Competence Centers can support and help grow startups

### Abstract

Selected on a national level, the 8 Italian Competence Centers involve excellent university centers and large private players, with the contribution of different stakeholders, to promote some key actions among PMI and startups: training, advisory and awareness on Industry 4.0 paradigm and its enabling technologies; setting up of live demos on new technologies and accessing to best practices; launching and acceleration of innovative and technological development projects; supporting of experimentation and production of new technologies; cooperation with competence centers at European level.

The main goal of the talk is to give a brief overview about of major activities performed by the Competence Centers in favor of startups, to support and help their growth within a more and more competitive and challenging technology market, with a special focus on the Mediterranean Competence Center 4 Innovation, active in Puglia and Campania and born to be a tool for disseminating culture and practices of innovation in the production of goods and services not only on the national territory but also in the whole Mediterranean basin.

### Short Biography

Leopoldo is Full Professor of Electrical and Electronic Measurements with the Department of Information Technology and Electrical Engineering of the University of Napoli Federico II, Italy, and Coordinator of the Technical/Scientific Committee of MedITech – one of the eight Italian Competence Centers on I4.0 enabling technologies.



He is Fellow Member of the IEEE Instrumentation and Measurement and Communications Societies, Chair of the IEEE Instrumentation & Measurement Society Italy Chapter, Vice-Chair of the Italian Association “GMEE-Electrical and Electronic Measurements Group”.

In 2009, he was awarded the “IET Communications Premium”, and in 2021, he was awarded the “2021 IEEE Instrumentation and Measurement Society Technical Award.

He is the author or co-author of more than 330 international scientific articles, one-third of which published in relevant international journals with impact factor.

## Marco Domenico Santambrogio



**Title:** Leonardo the “Multimagineering” Project

### Abstract

In the general perception, university and entrepreneurship form a dichotomy, for it is hard to couple them into productive and virtuous cycles. At NECSTLab, we embrace such a dichotomy, pushing it further by expanding our view over three axes: research, education, and personal well-being/ness.

We call it **Leonardo**.

Leonardo is our research project to augment students’ awareness of themselves and their abilities. It bloomed from the seed idea that technical competencies are just one of the key components to personal success. Resilience – the ability to define individual goals and plan towards them – is the natural step further. Finally – so far – we add one last term to complete the equation: awareness of personal talents and limits. The Leonardo project is organized over 4 Levels bundled in 2 Phases of 2 Levels each; more in detail, each Level spans from 1 up to 3 semesters. During each Level, the participants face challenges as part of a series of activities drawn from 3 areas: Learning, Personal Well-being/ness, Research. Each phase has its exit activity: an experience that encourages the participants to measure themselves over the skills



and competencies they have become more aware of. Participations to business competition are examples of these exit activities by offering the participant the final exposure to the real world.

### **Short Biography**

Marco D. Santambrogio (Senior Member, IEEE) received the Laurea degree in computer engineering from the Politecnico di Milano, Milan, Italy, in 2004, the MSc degree in computer science from the University of Illinois at Chicago, Chicago, IL, USA, in 2005, and the PhD degree in computer engineering from the Politecnico di Milano, in 2008. He was a post-doctoral fellow with the computer science and artificial intelligence laboratory, Massachusetts Institute of Technology, Cambridge, MA, USA. He led the MicroLAB for 3 years and founded the NECST Laboratory, at the Politecnico di Milano, in 2012. He is currently an associate professor with the Politecnico di Milano. His current research interests include reconfigurable computing, self-aware and autonomic systems, hardware/software co-design, embedded systems, and high-performance processors and systems.

### **Sara Notargiacomo**



**Title:** Huxelerate: Bringing Software Performance Optimization Research into the Market

#### **Abstract**

Industrial software and computing infrastructure complexity has increased by 4x in the past 10 years while software performance has become a mandatory requirement for all time-critical applications from automotive, to manufacturing and new energy. In this context, software development and computing infrastructure costs are increasing as well as time to market, eroding margins for all types of companies.



Huxelerate solves this problem by automating software performance and computing infrastructure optimization, reducing by up to 90% the related time and cost. In this talk, I will go through the evolutionary stages of Huxelerate: from research, vision, and product development to the business challenges faced as of today.

### **Short Biography**

Sara Notargiacomo is co-founder and Chief Business Officer at Huxelerate S.r.l. Master's degree in economics from Bocconi University (Milan). Over 7 years of experience in technology transfer and commercialization of innovative and research-based products in the computing architecture ecosystem. Before founding Huxelerate, Sara was Technology Transfer Manager at NECSTLab Politecnico di Milano.

### **Guido Walter Di Donato**



**Title:** GenoGra: Next-Generation Genome Analysis Pipeline

#### **Abstract**

Genome analysis will have a crucial role in tomorrow's science: from personalized medicine to pharmaceutical and biotech research. However, currently available tools are not simple and efficient enough to ensure its application on a large scale. In response to these problems, GenoGra is developing the first end-to-end genome analysis platform based on genome graphs, to enable a much simpler, efficient, and scalable analysis flow. This talk introduces GenoGra, with a focus on the path that made a research work become the technological innovation leading to the creation of a startup.



## Short Biography

Guido Walter Di Donato is the ideator of the technology underlying the platform proposed by the startup GenoGra, where he serves as CEO and COO. Graduated cum laude in biomedical engineering at the Politecnico di Milano and the University of Illinois at Chicago, he is currently a PhD candidate in Information Technology at the NECSTLab of the Politecnico di Milano.

Guido has authored over 10 scientific publications, and 1 international patent, and he has over 5 years of experience in computational genomics and high-performance graph analysis, and 4 years of experience in team and project management. Over the years, he has also developed several skills, both "hard" and "soft," that are critical for an entrepreneur in the deep-tech field, like leadership, problem solving, and public speaking.

## Bruno Vusini



**Title:** AMC Instruments – from an idea to the market

### Abstract

AMC Instruments was born in 2007 as Spin Off of Politecnico di Torino. After some years of pure R&D, the Company started to introduce in the market some special devices for the non-destructive inspection of wire ropes, used in different sectors such as cableways, heavy lifting and elevators. At that time, if we exclude the sector of cableways, all the main national and international regulations did not include NDT analysis in the assessment methods for rope inspections and the production of AMC was really innovative. AMC started immediately to cooperate with different R&D departments of different private companies in Europe and around the world, in order to apply those techniques for different wire ropes applications.



After some years, the offer of AMC started to be used widely and new regulations have been written. Between 2015 and 2017 the methodology was applied in a growing number of installations and some interesting contracts have been closed. At the end of 2018 AMC have been acquired by the multinational company 'Axel Johnson International', that is giving us all the support that we need to continue our journey in the industrial world.

### **Short Biography**

Bruno Vusini was born on 19/07/1976. In 2001 he got an MSc in Electrical Engineering, in 2004 he got a PhD in Electrical Engineering and from 2005 to 2007 he received a post doc fellowship in NDT (Politecnico di Torino). From 2007 he is Managing Director of AMC Instruments and he is author and co-author of more than 15 international technical papers, 2 patents, 1 book. He is member of UNI in two different technical committees. He is also 3 level ISO9712 in MRT.

### **Andrea Gulisano**



**Title:** Wave for Energy

#### **Abstract**

Wave for Energy is born from the mechanical engineering and aerospace research group of the Politecnico di Torino to transfer the ISWEC technology from the Politecnico's laboratories. After challenges to install the first system in a real operating environment in the island of Pantelleria, the company has developed a collaboration with a prime international energy player that has unlocked the development and industrialization of the technology. Today Wave for Energy is involved in the continuous development of the ISWEC technology, while it is



developing a new hybrid solution targeting small scale desalination for minor islands and offshore uses and offering highly specialized services in the offshore renewable energy sector, spanning from the analysis and design of new solution at concept stage, up to innovative mooring design and calculation for offshore applications.

### **Short Biography**

Andrea is the Chairman of the Board of Wave for Energy S.r.l., a Politecnico di Torino's spinoff.

Andrea holds an MSc in Aerospace Engineering from Politecnico di Torino and from Politecnico di Milano. He has been a member of the Alta Scuola Politecnica 4th cycle. He received the award of the Fulbright-Finmeccanica scholarship to pursue an MBA from the MIT Sloan School of Management in 2013.

After completing the technology transfer process, in Wave for Energy Andrea worked on the development of the company, following the licensing of the ISWEC technology IP to a global energy player.