### **Conference / Conferences**



Ilan Chabay

"A Participatory Science Exploration of Floating and Freezing Bubbles"

**Abstract**: Soap bubbles that we blow into the transparent Frozen Bubble Box behave in surprising ways. We can all guess what is making the bubbles act so strangely and then test our ideas with experiments. It is a chance to nurture your curiosity and enjoy learning what the activity we call science is really about.



Bo Stjerne Thomsen

"The importance of creativity for children's learning"

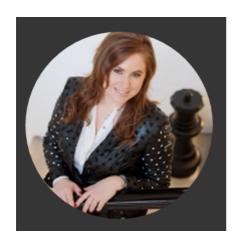
**Abstract**: The LEGO Foundation is working with an international network of researchers and institutions to build knowledge and expertise around the understanding of play, creativity and learning, in order to support a future where children are empowered to become creative, engaged, lifelong learners. Children's curiosity and hands-on experiences are the critical starting point for creativity, and we explore a new science where different academic disciplines collaborate to understand the influence of learning experiences on children's brain development and their future success.



**Abstract: TBA** 

#### Annamaria Testa

# "Giochiamo con le parole



Judit Polgar

"Creativity and chess"

**Abstract**: Different aspects of creativity. Creativity – the inevitable part of innovation, learning and happiness. Creativity in my chess carrier; creativity in my personal life; creativity – as source of pleasure. Experiencing creativity – happiness, candour and voyage of exploration in children's life. Creativity in the Chess Palace Educational Programme – chess as an exceptional learning tool. Facilitating development of children, fostering their talent and creativity through chess.



#### Francois Pachet

### "Style and Creativity in Music"

**Abstract**: We argue that style is a central notion of creativity: inventors, creators do not only create interesting or creative artifacts, they invent new ways of doing things, which we can call "styles". In this talk I will show several attempts at modeling style from a computational perspective in music composition, harmonisation, improvisation and accompaniment. Modeling style involves looking at music from various technical viewpoints: statistical, combinatorial and machine-learning. I will use various reorchestrations of "Ode to Joy", the European anthem to illustrate these various approaches to style. In the interactive demonstration, attendants will be able to generate accompaniments in various styles for songs picked up from a database.



Andreas Roepstorff

"We are in it, together! Building, coupling, trusting"

**Abstract**: When people build things together, not only their actions, but also their words, bodies and hearts become coordinated with each other. These dynamics may be important for collaboration, and they seem to stay with the objects even after the work is done. I will illustrate this with functional brain images and measurements of heart rate dynamics and movement sensors.



### **Thomas Fink**

## "Homer's Iliad and Wikipedia"

**Abstract**: One, the first great work in Western literature; the other, the world's most-used encyclopedia. The link? Both are the products of emergent creativity. The long narrative poem The Iliad was created over generations by a series of oral poets, each of whom improved on the previous version, deleting some passages and adding others. Meanwhile, Wikipedia relies on contributions from the public, on the same basis of deleting and inserting. We propose that anonymous collaboration with constrained freedom, of which these are prime examples, make emergent creativity possible, and may profoundly extend the limits of human creativity.



### **Ennio Peres**

# "Giochi di matematica magica"

Abstract: La Matematica è ritenuta una materia arida e noiosa solo da chi la considera unicamente come la disciplina che insegna a fare i conti. In realtà, nel processo di risoluzione di un problema matematico, lo svolgimento dei calcoli costituisce solo il momento terminale (oggettivamente, monotono e ripetitivo); la fase più importante, e assai più stimolante, è proprio quella relativa alla ricerca del procedimento da seguire. Nell'insegnamento della Matematica, il ricorso a delle proposte ludiche consente di affrontare in maniera piacevole la soluzione di problemi di varia complessità e rappresenta, quindi, uno strumento di motivazione allo studio molto più coinvolgente di quell'arido e intricato guazzabuglio di passaggi algebrici che tradizionalmente deprime e scoraggia la maggioranza degli studenti di ogni ordine e grado. In particolare, un alto potenziale di coinvolgimento è

posseduto dai giochi di *matemagica*, ovvero da quei giochi di prestigio il cui trucco è basato su un principio matematico. In questo breve intervento, Ennio Peres mostrerà come è possibile ideare giochi di questo tipo, partendo da particolari concetti matematici. Al termine, alcuni giovani partecipanti al laboratorio tenuto in mattinata, presenteranno alcuni semplici, ma sorprendenti esempi del genere.