

**“The Onassis Foundation  
Science Lecture Series 2017 in Physics”**

“Quantum physics frontiers explored with cold atoms,  
molecules and photons”

Heraklion, Crete, July 24 - 28, 2017

<b>Monday 24 July</b>	09:00 - 09:45	Registration
	09:45 - 10:00	Welcome
	10:00 -11:15	“Manipulation and control of photons and atoms and applications to quantum metrology I”, by <b>Serge Haroche</b>
	11:15 -11:45	Break
	11:45 -13:00	“Measurement at the quantum frontier”, by <b>Jun Ye</b>
	13:00 -14:30	Lunch Break
	14:30 – 15:45	“Controlling and exploring quantum matter using ultracold atoms in optical lattices I”, by <b>Immanuel Bloch</b>
<b>Tuesday 25 July</b>	09:30 -10:45	“Manipulation and control of photons and atoms and applications to quantum metrology II”, by <b>Serge Haroche</b>
	10:45 -11:15	Break
	11:15 -12:30	“What’s the matter with cold molecules”, by <b>Jun Ye</b>
	12:30 -14:00	Lunch Break
	14:00 – 15:15	“Controlling and exploring quantum matter using ultracold atoms in optical lattices II”, by <b>Immanuel Bloch</b>
<b>Wednesday 26 July</b>	09:30 -10:45	“Towards the ultimate precision limits: an introduction to quantum metrology I“, by <b>Luiz Davidovich</b>
	10:45 -11:15	Break
	11:15 -12:30	“Cold atoms in low dimension: The Kostelitz – Thouless transition revisited I”, by <b>Jean Dalibard</b>

	12:30 – 14:00	L u n c h B r e a k
	20:00	“How blue sky research leads to innovations”, by <b>Serge Haroche</b> - PUBLIC LECTURE (in English)
<b>Thursday 27 July</b>	09:30 -10:45	“Cold atoms in low dimension: The Kostelitz – Thouless transition revisited II”, by <b>Jean Dalibard</b>
	10:45 -11:15	B r e a k
	11:15 -12:30	“Towards the ultimate precision limits: an introduction to quantum metrology II”, by <b>Luiz Davidovich</b>
	12:30 – 14:00	Lunch Break
	14:00 – 15:15	“Two particle correlations with photons and atoms: landmarks in the second quantum revolution I”, by <b>Alain Aspect</b>
<b>Friday 28 July</b>	09:30 -10:45	“Nonlinear and collective dynamics with ultracold atoms”, by <b>Nikolaos Proukakis</b>
	10:45 -11:15	B r e a k
	11:15 -12:30	“Two particle correlations with photons and atoms: landmarks in the second quantum revolution II”, by <b>Alain Aspect</b>
	12:30 – 14:00	Lunch break
	14:00 -15:15	“Non-Equilibrium quantum dynamics and dissipation in quantum gases”, by <b>Nikolaos Proukakis</b>