U srijedu, 24. listopada 2012 u 17:30 u predavaonici 005 na Matematičkom odsjeku PMF-a,

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održat će predavanje na znanstvenom kolokviju pod naslovom:

### Optimal placement of sensors and actuators for waves

**Abstract:**

In this lecture we address the problem of the optimal placement of sensors and actuators for wave-like equations.

Using Fourier series representations the problem can be recast as an optimal design one involving all the spectrum of the laplacian. We shall develop a complete theory allowing to distinguish, depending on the complexity of the data to be observed/controlled, cases in which the solution is a classical with a finite number of connected components, from others in which the optimal set is of Cantor type or those when relaxation occurs. These results will be illlustrated by numerical simulations.

The lecture is based on recent joint work in collaboration with Y. Privat and E. Trélat.

Tijekom boravka prof. Zuazua će održati i predavanje *Optimal design and numerics* u okviru Seminara za diferencijalne jednadžbe i numeričku analizu, u ponedjeljak 22. listopada u 12 sati u predavaonici 109 na PMF-Matematičkom odsjeku.