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Course Title				
Non-linear Physics: Quantum Chaos				
Course Description				
Graduate level introduction to recent developments in the theory of quantum chaos and its applications. The course is aimed at M.Sci. students, Ph.D. students and postdoctoral fellows in physics. Semiclassical quantization - Gutzwiller trace formula. Random matrix theory. Physics of mesoscopic systems - Universal conductance fluctuations. Periodic orbit theory of diffraction and tunneling. Acoustic chaos.				
Programme				
Required Reading				
P. Cvitanovic et al: www.nbi.dk/ChaosBook/				
Level	<i>Master/Ph.D.</i>			
Teacher(s)	<i>Professors Predrag Cvitanovic Henrik Bruus and Andy Jackson</i>			
Duration	<i>One Semester</i>			
Date of First Lecture	<i>2/9/99</i>			
Day and Time	<i>Thursday: 13.15-15.00 lecture Friday: 10.15-12.00 problem session</i>			
Location	<i>Aud. C (NBI) lecture, Aud. B (NBI) problem sessions</i>			
Teaching Methods	<i>Lectures Problem Sessions</i>			
Assessment	<i>Term project</i>			
Study Load	<i>4</i>	<i>Årsværk/Punkter</i>	<i>10</i>	<i>ECTS credits</i>
Comments	<i>Homepage: www.nbi.dk/~predrag/NBIcourses/Fysik711B-99.html</i>			