



5.00 credits

30.0 h + 15.0 h

Q2

Teacher(s)	Bieliavsky Pierre ;
Language :	French
Place of the course	Louvain-la-Neuve
Learning outcomes	
Evaluation methods	Oral exam
Teaching methods	Lectures and homeworks.
Content	-Introduction to Lie groups and Lie algebras -Homogeneous spaces -Riemannian symmetric spaces -Theory of representations of Lie groups. Kirilov's orbit method. -Introduction to quantization and quantum geometry.
Bibliography	<ul style="list-style-type: none"> <li>• P. Malliavin, Géométrie différentielle intrinsèque.</li> <li>• J. Milnor, Topology from a differentiable viewpoint.</li> <li>• S. Kobayashi and K. Nomizu, Foundations of differential geometry.</li> <li>• S. Helgason, Differential geometry, Lie groups and symmetric spaces.</li> <li>• A. Kirillov, Lectures on the orbit method.</li> </ul>
Faculty or entity in charge	MATH

<b>Programmes containing this learning unit (UE)</b>				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Mathematics	<a href="#">MATH2M</a>	5		
Master [120] in Physics	<a href="#">PHYS2M</a>	5		
Master [60] in Mathematics	<a href="#">MATH2M1</a>	5		