Mathematics

MATH 522  Lie Groups and Lie Algebras I  credit: 4 hours.
A general introduction to Lie groups and algebras and their representation theory. Theory of finite group representations, Lie groups as matrix groups, and as differentiable manifolds, Lie algebras as tangent spaces and as abstract objects, and their representations. Examples of the classical groups. May be repeated up to 8 hours. Prerequisite: Undergraduate linear algebra, abstract algebra, point set topology, differentiation on manifolds.

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<tr>
<th>CRN</th>
<th>Type</th>
<th>Section</th>
<th>Time</th>
<th>Days</th>
<th>Location</th>
<th>Instructor</th>
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<tbody>
<tr>
<td>48963</td>
<td>Lecture-Discussion</td>
<td>X1</td>
<td>12:00 PM - 12:50 PM</td>
<td>MWF</td>
<td>343 - Altgeld Hall</td>
<td>Boca, F</td>
</tr>
</tbody>
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Students from the following programs must contact the Director of Graduate Studies in Mathematics <Laugesen@illinois.edu> to request permission to register for the course: MS:Economics:Policy Econ -UIUC or MS: Financial Engineering.