<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Event</th>
<th>Speaker(s)</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday, March 04, 2019</td>
<td>12:00-12:00 am</td>
<td><strong>Group, Lie and Number Theory</strong> -- No Talk () Winter break -- 4088 East Hall</td>
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<td></td>
<td>12:00-12:00 am</td>
<td><strong>Geometry &amp; Physics</strong> -- Winter Break () TBA -- 4096 East Hall</td>
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<tr>
<td>Tuesday, March 05, 2019</td>
<td>4:00-5:00 pm</td>
<td><strong>Colloquium Series</strong> -- Winter Break () Winter Break -- 1360 East Hall</td>
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<tr>
<td>Wednesday, March 06, 2019</td>
<td>2:30-4:00 pm</td>
<td><strong>Student Machine Learning</strong> -- Israel Diego-Guerra (University of Michigan) <strong>Sequence Modeling:</strong> Recursive and Recurrent Networks -- 3866 East Hall</td>
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<tr>
<td>Friday, March 08, 2019</td>
<td>12:00-12:00 am</td>
<td><strong>Combinatorics</strong> -- () Spring break, no seminar -- 2866 East Hall</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Group, Lie and Number Theory
Monday, March 04, 2019, 12:00am-12:00am
4088 East Hall
No Talk ()
Winter break

Geometry & Physics
Monday, March 04, 2019, 12:00am-12:00am
4096 East Hall
Winter Break ()
TBA

Colloquium Series
Tuesday, March 05, 2019, 4:00pm-5:00pm
1360 East Hall
Winter Break ()
Winter Break

Student Machine Learning
Wednesday, March 06, 2019, 2:30pm-4:00pm
3866 East Hall
Israel Diego-Guerra (University of Michigan)
Sequence Modeling: Recursive and Recurrent Networks

Recurrent networks are networks that can be trained to learn time dependence of the variables. This can be thought of as a neural network where the computational graph is a directed path. This chapter extends the idea of a computational graph to include cycles. These cycles represent the influence of the present value of a variable on its own value at a future time step. Such computational graphs allow us to define recurrent neural networks. We then describe many different ways to construct, train, and use recurrent neural networks.

Combinatorics
Friday, March 08, 2019, 12:00am-12:00am
2866 East Hall
()  
Spring break, no seminar