7-31-2020

2020 Summer Undergraduate Research Program Virtual Symposium

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2020 SURP Symposium

2020 Summer Undergraduate Research Program Virtual Symposium
Friday, July 31, 2020
1:00 - 3:30 pm

Use the links below to access the virtual symposium sessions.
You will need the password provided in the event invitation to access all sessions.

Event Schedule

1:00 - Welcome, Introductions, & Keynote Address [Main Zoom Room]

Welcome Address by Jennifer Cooley, Associate Dean College of Humanities, Arts and Sciences

UNI Alumni Keynote Address
Wesley Even
Deputy Group Leader
Computational Physics and Methods Group
Los Alamos National Laboratory
University of Northern Iowa, Physics Major, 2003
1:30 - Concurrent Sessions by SURP Teams

Please See Detailed Program Below

3:30 - **Main Zoom Room** Open for Follow Up Conversations - The Main room will remain open for as long as needed.

How to engage with a scientific researcher about their project - [tips](#).

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## Schedule of Concurrent Sessions

This area will be finalized by Thursday morning.

<table>
<thead>
<tr>
<th><strong>Main/Concurrent Session Room 1</strong></th>
<th><strong>Concurrent Session Room 2</strong></th>
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<tr>
<td>with Room Host: Marcy Seavey</td>
<td>with Room Host: Pavel Lukashev</td>
<td>with Room Host: Andrew Berns</td>
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<td>1:30-1:42 Fluorescent Speleothem in Wind Cave and their Synthetic Analogues</td>
<td>1:30-1:42 First-principles study of V(1+x)S(2-x) monolayer</td>
<td>1:30-1:42 Maximizing Participation in an Online Mathematics Course</td>
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<tr>
<td>Teresa Feldman and Joshua Sebree, University of Northern Iowa</td>
<td>Adam Ramker, Evan O'Leary and Pavel Lukashev, University of Northern Iowa</td>
<td>Lauren Falck and Douglas Shaw, University of Northern Iowa</td>
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<tr>
<td>1:42-1:54 Analyzing and Classifying Single Molecule Microscopy Data</td>
<td>1:42-1:54 Chemical substitution induced half-metallicity in CrMnSb(1-x)Px</td>
<td>1:42-1:54 Developing Arduino Coding Curriculum</td>
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</tbody>
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1:54-2:06
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Image analysis of DNA AFM images  
Sophie Roberts and Ali Tabei, University of Northern Iowa

1:54-2:06  
Modeling the Griffiths Phase in Manganese Intercalated Tantalum Disulfide  
Aaron Janaszak, Lukas Stuelke, and Paul Shand, University of Northern Iowa

2:06-2:18  
Dynamic Monte Carlo Modeling of Protein-DNA Interactions  
Aaron Kirchman and Ali Tabei, University of Northern Iowa

2:06-2:18  
Griffiths Phase of the Three Dimensional Ising Model  
Paul White and Paul Shand, University of Northern Iowa

2:18-2:30  
Blood Pressure Awareness Among University of Northern Iowa Students  
Abigail Weekley*, Theresa Spradling*, and Robert Good^  
University of Northern Iowa*, Carle Heath System^

2:18-2:30  
Additive Manufacturing with Nanocellulose  
Nathan Schmidt and Timothy Kid, University of Northern Iowa

2:30-2:42  
Chemical substitution induced half-metallicity in CrMnSb(1-x)Px  
Devon VanBrogen, Adam Ramker, Evan O'Leary, and Pavel Lukashev, University of Northern Iowa

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Fluorescent Speleothem in Wind Cave and their Synthetic Analogues  
Teresa Feldman and Joshua Sebree, University of Northern Iowa

2:42-2:54  
Sacrificial seed’s impact on native seedling establishment in prairie restoration  
Jacey Meier, Isabella Betzer, and Laura Jackson, University of Northern Iowa

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First-principles study of V(1+x)S(2-x) monolayer  
Adam Ramker, Evan O'Leary and Pavel Lukashev, University of Northern Iowa
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Lauren Falck and Douglas Shaw, University of Northern Iowa

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Alan McKay and Andrew Berns, University of Northern Iowa

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Taylor Murray and Ai Wen, University of Northern Iowa

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<join room> links have been removed. This event took place on Friday, July 31, 2020.

Thank you to our sponsors who make the Summer Undergraduate Research Program possible.

Private Donors & UGRs

- Dr. Robert and Brenda Good Undergraduate Research Fellowship
- Myrna and Gary Floyd Undergraduate Research Assistantship
- Irvine Prairie Restoration Fund
- Merry and Steve Heilmann
- Physics Student Research and Awards Fund

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- Dean’s Office, College of Humanities, Arts and Sciences

UNI Departments of:
- Biology
- Chemistry and Biochemistry
- Computer Science
- Earth and Environmental Science
- Mathematics
- Physics

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