<u>Poster session I: 11am-12pm</u> (Display board #s indicated next to titles)

Epistemological Framing and External Knowledge in Physics Problem Solving - # 5

PHAS: Sandy Martinuk

Shifting to a Copernican model of the Solar System by shifting away from a Copernican model of teaching - #3

PHAS: Peter Newbury

Physics & Astronomy TA Professional Development Program - #6 PHAS: Jonathan Massey-Allard, Sandra Meyers and Natasha Holmes

Assessment of Learning in a Liquid-Liquid Extraction Experiment and Technical Skill in an Undergraduate Chemistry Laboratory - #2 CHEM: Nicholas R. Mah

The Operon Concept Inventory: Measuring Targeted Learning Gains in Microbiology - #12

LS: Jared Taylor

Measuring Student Confidence and Balance of Lab Material in a Computer Science Course - #15

CPSC: Ryan Golbeck

MAPS, Mathematics Attitudes Perceptions Survey - #13

MATH: Warren Code, Joseph Lo, Sandi Merchant

Basic Skills in Mathematics - #16 MATH: Joseph Lo, Costanza Piccolo

Assessing Basic Skills for Mathematical Proof - #14

MATH: Sandi Merchant, Andrew Rechnitzer

Promoting & Measuring General Scientific Reasoning Expertise of 2nd Year Students - #8

EOS: Francis M. Jones, Mark Jellinek, & Michael G. Bostock

Measuring Novices' Field Mapping Abilities Using an In-class Exercise Based on Expert Task Analysis - #9

EOS: Josh Caulkins

Geologic Expertise and Field Mapping: Lessons from a 3<sup>rd</sup> year Undergraduate Field School - #11

EOS: Josh Caulkins

The Observation Feedback Loop: Using Classroom Observation Data to Improve Student Engagement - #4

EOS: Erin Lane

<u>Poster Session II: 12:30-1:30pm</u> (Display board #indicated next to titles)

Tracking Students' Knowledge of Electricity and Magnetism from 1st to 3rd Year - #1

PHAS: Jim Carolan

On Guided Invention Activities that Support Scientific Reasoning and Domain Learning - #5

PHAS: Natasha Holmes, Ido Roll, James Day & Doug Bonn

Learning Science by Doing Science -- Designing, Executing, and Analyzing Experiments in Physics 100 Labs - #3

PHAS: Ido Roll

Evaluation of Learning Gains in CHEM 123 students performing Experiment 12 - pH in Blood - #4

CHEM: Samantha D'souza

Measuring Learning Gain in a Transformed Introductory Ecology Course - #17

LS: Malin Hansen

Improving Student Engagement and Self-Assessment Through Gamification - #13

CPSC: Kim Voll & Andre Malan

Revitalizing Labs: Lessons from 2.5 Years of Iterative Development and Assessment of Digital Logic Labs - #10

CPSC: Elizabeth Patitsas & Steve Wolfman

Considering the Student Perspective: Factors that Undergraduates Perceive as Influential to their Academic Performance in Science - #12

CWSEI: Ashley Welsh

How do Novices Spend Time Programming with Matlab - #18

MATH: Warren Code

Redesign of Computer Labs for Engineering Students in a Linear Algebra Course - #18

MATH: Warren Code, Costanza Piccolo

Problem-solving Workshops in First-year Calculus - #16

MATH: Warren Code, Costanza Piccolo

Tracking student progress with a mineralogy/petrology concept inventory - #7

EOS: Alison Jolley, Sara Harris, & Mary Lou Bevier

Student Evaluations of Teaching: How have EOS-SEI courses

fared - #9

EOS: Sara Harris