

# Physics Education Research Conference

July 23<sup>rd</sup> to July 24<sup>th</sup>

# 2008

In the last ten years, the use of research-based instructional materials has moved well beyond the traditional research university. There are two reasons for this: (1) individuals in PER are moving from positions as graduate students and post docs at research universities to beginning faculty positions at a wide variety of colleges and universities and (2) the instructional materials developed by the PER community are being used by more and more faculty members outside of PER, at their home institutions.

Despite the fact that the use of these materials is so widespread, there is relatively little data documenting the effectiveness of these materials with different populations of students. In this session we encourage those who are using research-based instructional materials with non-traditional students at either the pre-college level or the college level to share their experiences as instructors and researchers in these classes. By inviting researchers from the education community, who specialize in these issues, we hope to establish a dialog between a diverse group of researchers in an effort to align the results from research with the instructional goals of the physics education community.

**PER with  
Diverse  
Student  
Populations**


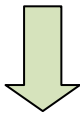


University of Alberta  
Edmonton, Canada



# Wednesday, July 23<sup>rd</sup> (buses run from 6-6 PM and 8-10:30 PM)

## Bridging Session | Presiding: Sabella

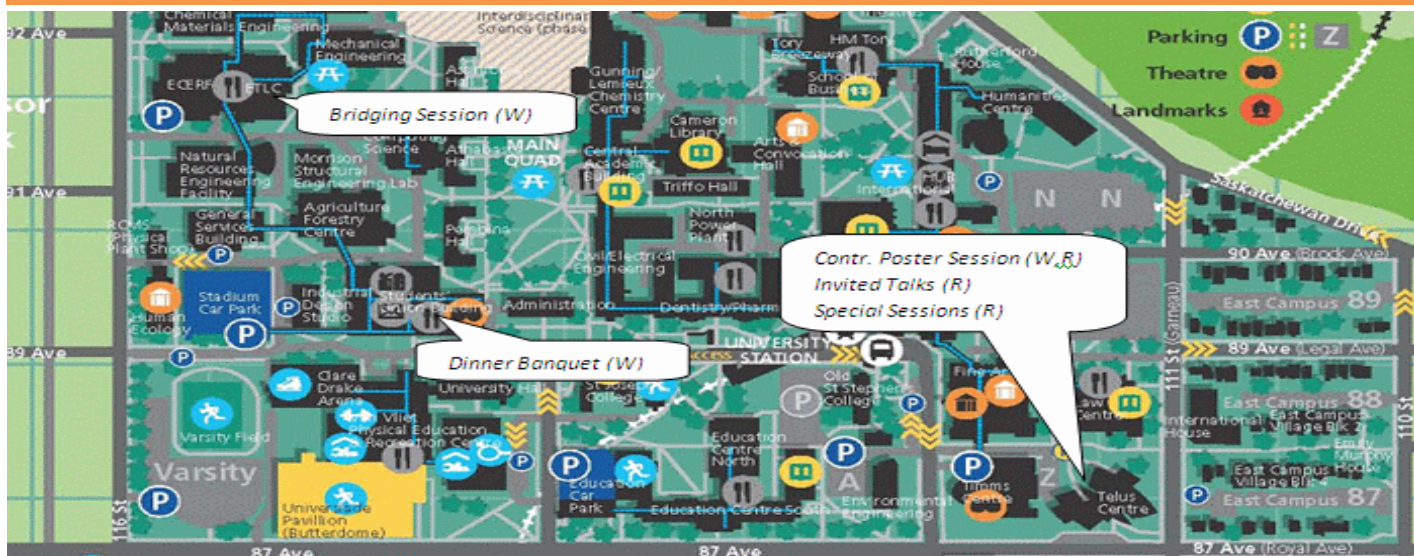
<p><b>3:30 PM</b>    <b>Inequities in Physics Access and Enrollment in Urban High Schools</b> <i>Angela Kelly, Lehman College</i></p>		<p><b>JA.01</b></p>
<p><b>4:00 PM</b>    <b>A race-identity perspective on mathematics learning and participation</b> <i>Danny Martin, University of Illinois - Chicago</i></p>	<p>Engineering Teaching &amp; Learning Complex (E1-001)</p>	<p><b>JA.02</b></p>
<p><b>4:30 PM</b>    <b>Impact of chemistry teachers' knowledge and practices on student achievement</b> <i>Kathryn Scantlebury, University of Delaware</i></p>		<p><b>JA.03</b></p>

\*Contributed Posters can be set up between 5 PM and 8 PM in the TELUS Centre Atrium

## Banquet and Poster Session | Presiding: Thompson

<p><b>6:00 PM</b>    <b>Dinner Banquet, Dinwoodie Lounge (Ticket Required)</b></p>	<p>Dinwoodie Lounge</p>	
<p><b>Fostering science learning in diverse urban settings</b> <i>Kenneth Tobin, Graduate Ctr. of the City University of New York</i></p>		<p><b>DT.01</b></p>
<p><b>8:00 PM</b>    <b>Contributed Poster Session, Cash Bar</b></p>	<p>TELUS Centre Atrium</p>	<p><b>CP.711</b> to <b>CP.821</b></p>
<p><i>Posters will remain on display for the duration of the conference</i></p>		

Campus Map (Engineering Teaching & Learning Complex (ETLC), Student Union Building - Dinwoodie Lounge, TELUS Centre)



## Thursday, July 24<sup>th</sup> (buses run from 7-9 AM and 4-7 PM)

### Special Sessions 1

8:30 AM – 10:00 AM	Targeted Poster Sessions				Round-table Disc.
	TELUS 217 <b>TP-A</b>	TELUS 219 <b>TP-B</b>	TELUS 236 <b>TP-C</b>	TELUS 238 <b>TP-D</b>	TELUS 145 <b>RT-A</b>
Implementing PER in Other Cultures (Dykstra)	Does PER-based instruction help underrepresented groups succeed, and how can it do so better? (Crouch)	Developing learning skills in the physics classroom to attend to diverse populations (Yerushalmi/ Singh)	It works there. Will it work here? (Cummings)	Analyzing PSET for Content, Confidence and Comfort ... So Why Don't You Want to Teach Physical Science? (Van Wormer)	
<i>Discussant:</i>	Kenneth Tobin	Kathryn Scantlebury	Danny Martin	Eric Dey	

10:00 AM

Break

TELUS Centre, Atrium

### Invited Talks | *Presiding: Singh*

10:30 AM **What is Nepantla and How Might it Help Educational Researchers Conceptualize Knowledge for Teaching?**  
Rochelle Gutierrez, University of Illinois - Urbana-Champaign



IT.01

11:00 AM **A variety of diversity: Facing higher education's educational challenges**  
Eric Dey, University of Michigan

TELUS 150



IT.02

11:45 AM

Luncheon

Outside TELUS Centre

## Special Sessions 2

1:15 PM – 2:45 PM	Targeted Poster Sessions				Round-table Disc.
	TELUS 217 <b>TP-A</b>	TELUS 219 <b>TP-B</b>	TELUS 236 <b>TP-E</b>	TELUS 238 <b>TP-F</b>	TELUS 145 <b>RT-B</b>
Implementing PER in Other Cultures (Dykstra)	Does PER-based instruction help underrepresented groups succeed, and how can it do so better? (Crouch)	Applications of PER in diverse settings: Perspectives on audience, method and implementation (Brewer)	Showing Ourselves Friendly: Addressing Race in Physics Culture (Dancy)	Learn "How to teach Physics" from The Feynman Lectures on Physics: An example on Gravitation (Lee)	
<b>Discussant:</b>	Kathryn Scantlebury	Kenneth Tobin	Angela Kelly	Rochelle Gutierrez	

2:45 PM

Break

TELUS Centre, Atrium

## Special Sessions 3

3:00 PM – 4:30 PM	Targeted Poster Sessions			
	TELUS 217 <b>TP-C</b>	TELUS 219 <b>TP-D</b>	TELUS 236 <b>TP-E</b>	TELUS 238 <b>TP-F</b>
Developing learning skills in the physics classroom to attend to diverse populations (Yerushalmi/Singh)	It works there. Will it work here? (Cummings)	Applications of PER in diverse settings: Perspectives on audience, method and implementation (Brewer)	Showing Ourselves Friendly: Addressing Race in Physics Culture (Dancy)	
<b>Discussant:</b>	Rochelle Gutierrez	Angela Kelly	Eric Dey	Danny Martin

## Panel Discussion | *Presiding: Thompson, Sabella*

4:30 PM – Led by *Dey, Gutierrez, Kelly, Martin, Scantlebury, Tobin*  
5:30 PM

TELUS 150

PD.01

## PER Dating Service | *Presiding: Thompson, Sabella*

5:30 PM Interesting in replicating a study at another institution with a different population of students?  
*\* if you did not submit a Dating Service abstract you can still participate and possibly find someone special.*

TELUS, Atrium  
Cash Bar

DS.01,  
DS.02, +  
more