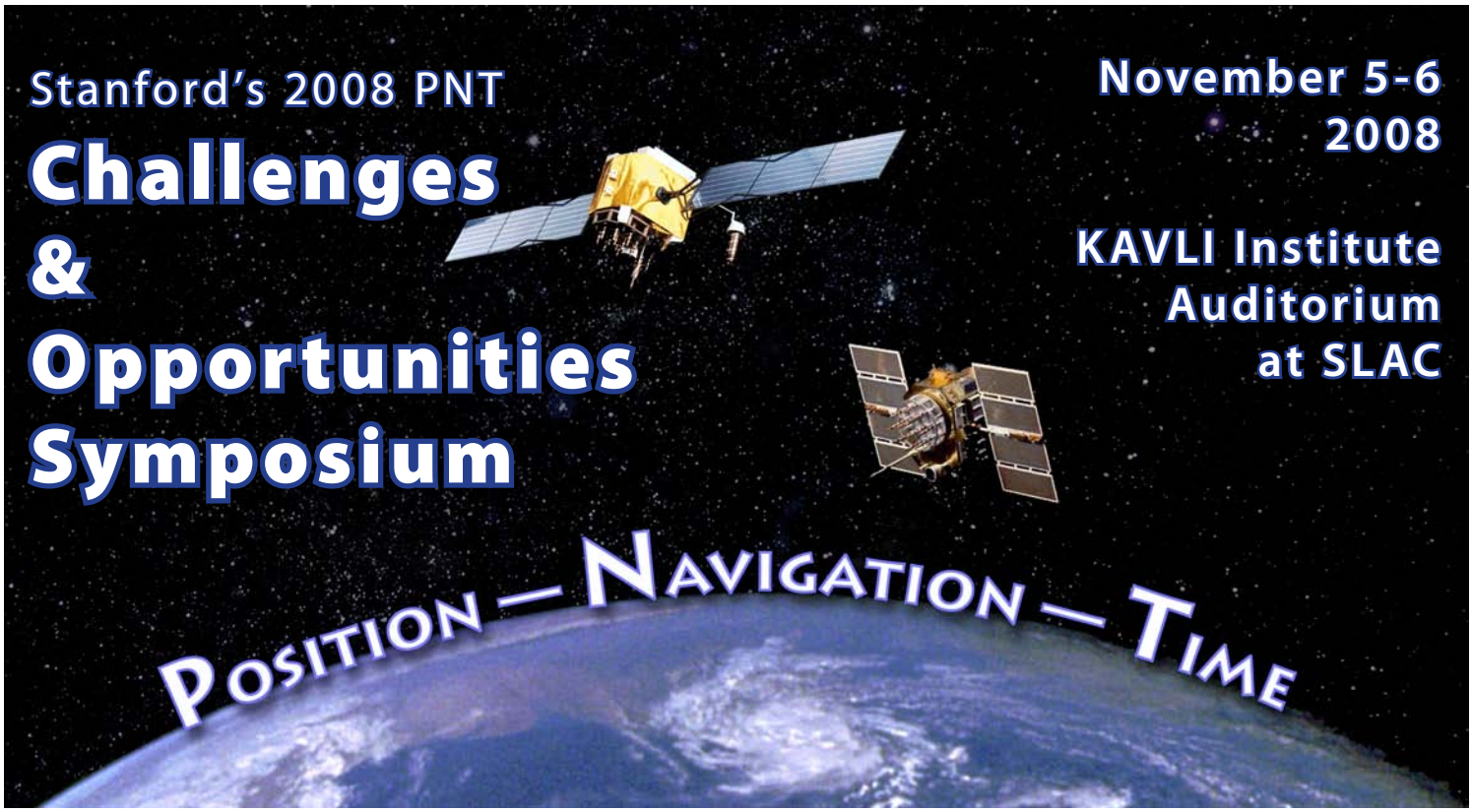
Stanford's 2008 PNT

Challenges & Opportunities Symposium

November 5-6 2008

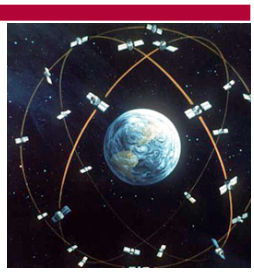
KAVLI Institute Auditorium at SLAC



The major challenges and opportunities for the next ten years and beyond...

Schedule

- Nov. 5—All Day, plus Dinner
- Nov. 6—Morning



Hosts

- Per Enge
- Jim Spilker
- Mark Kasevich
- Umran Inan
- Tom Langenstein

Invited Speakers

- **Brad Parkinson** — The Future of GPS
- **Col Dave Madden** — GPSIII & OCX Development
- **Frank Czopek** — Pre-History of GPS
- **Max Klein** — PNT Education at Stanford
- **Yi-Hsiu Wang** — The Real Marketplace
- **Mark Dransfield** — Geophysical Airborne Surveys
- **Karl Kovach** — The Six GPS Anomalies in October 2007
- **Grace Gao** — Understanding Gallileo and Compass Signals
- **Dennis Byrnes** — Interplanetary Navigation Past & Future
- **Christoph Günther** — Reliable Carrier Phase Positioning
- **Chong Cao/Ming Luo** — COMPASS Satellite Development
- **Stan Honey & Ken Milnes** — Navigating the sports field
- **Mark Petovello** — Software Receivers & Multi-GNSS Signals
- **Ron Hatch** — Agriculture & Other High Precision Applications
- **Paul Montgomery** — Current Trends in Automated Farming
- **Steve Rock** — Robotic Exploration of the USS Macon Crash Site
- **Daniel Leaf** — Multi-Mode Position Navigation & Time (MM-PNT)
- **Edward LeMaster** — Spacecraft Autonomy, Nav & Control Testbed
- **Bob Byer** — LISA: Flying Satellite Constellations to Picometer Precision
- **Leo Hollberg** — Atomic Clocks & Magnetometers for Navigation & Metrology

Plus: *Student Poster Session*

Trimble · Lockheed Martin · ITT · Polaris Wireless · Northrop Grumman · Boeing

SPACE IS LIMITED to 150 Attendees! — RSVP Required

SCPNT

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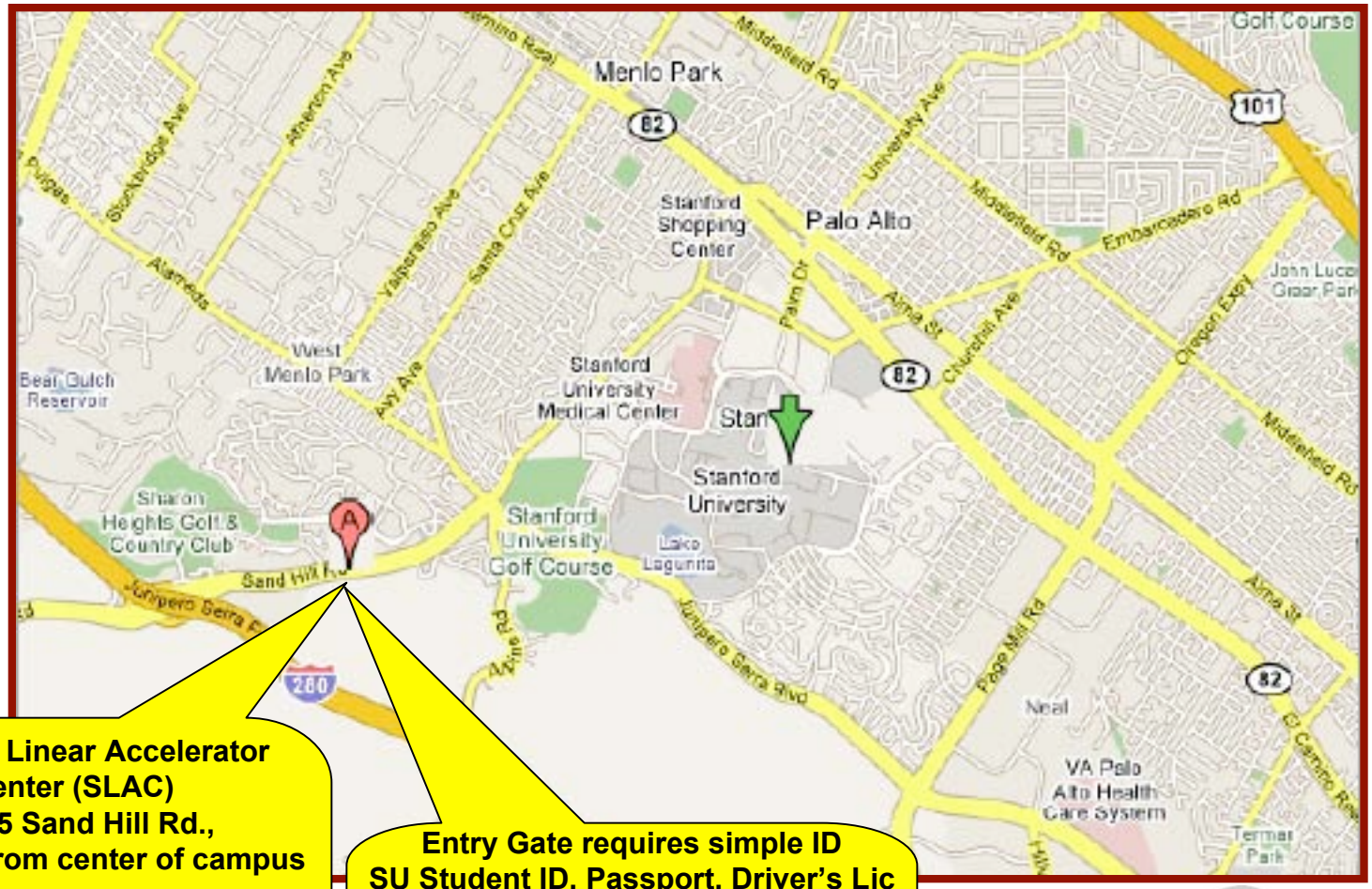
'PNT Challenges and Opportunities' Symposium

November 5th and 6th, 2008



Stanford Linear Accelerator Center (SLAC)
2575 Sand Hill Rd.,
~ 2 miles from center of campus
-
37 degrees 25'12.28" N
122 degrees 12'18.54" W
-
From Hwy 280
take Sand Hill Rd east ~ 1/2 mile

Entry Gate requires simple ID
SU Student ID, Passport, Driver's Lic
-
Free Parking Available
-
Kavli Institute Auditorium
1st Building on Right

SCPNT
Stanford Center for Position, Navigation and Time

Stanford's 2008 PNT Challenges and Opportunities Symposium - 'R12'

Day / Date	~ Start Time	~mins w/ Q&A	Speaker	Affilation	Title of Presentation
Wed - 11/5/08	*8:00am*	*30*	-	-	*Reception & Coffee Service in Lobby*
	8:30am	10	Charbel Farhat	Stanford Aero Astro	Opening Comments
	8:40am	30	Frank Czopek	Boeing	'Pre-Histroy of GPS'
	9:10am	30	Yi-Hsiu Wang	Atheros	'The Real Marketplace'
	9:40am	30	Leo Hollberg	NIST	'Atomic Clocks and Magnetometers for Navigation and Metrology'
	10:10am	*10*	-	-	*Morning Break*
	10:20am	30	Karl Kovach	The Aerospace Corp	'The Six GPS Anomalies in Oct '07'
	10:50am	30	Steve Rock	Stanford - Aero Astro	'Robotic Exploration of the USS Macon Crash Site'
	11:20am	30	Mark Dransfield	Fugro	Geophysical Airborne Surveys
	11:50am	*60*	-	-	*Catered Lunch at SLAC Cafeteria*
	12:50pm	30	Chong Cao / Ming Luo	Tsinghua University of China / Stanford SOE	'COMPASS Satellite Navigation System Development'
	1:20pm	30	Grace Gao	Stanford - Aero Astro	'Understanding Galileo and Compass Signals'
	1:50pm	30	Bob Byer	Stanford - Physics	LISA - Flying Satellite Constellations to Picometer Precision
	2:20pm	*20*	-	-	*Break & Student Poster Session #1*
	2:40pm	30	Dennis Byrnes	JPL	'Interplanetary Navigation Past & Future"
	3:10pm	30	Christoph Guenther	German Aerospace Center / Technische Universität München	'Reliable Carrier Phase Positioning'
	3:40pm	30	Stan Honey and Ken Milnes	Sportvision	'Navigating the sports field'
	4:10pm	30	Paul Montgomery	Novariant	'Current Trends in Automated Farming'
	4:40pm	*45+*	-	-	*Student Poster Session #2*
	6:00pm	*120*	-	-	*Reception and Dinner at Faculty Club*
	7:30pm	30	Brad Parkinson	Stanford - Aero Asto	Dinner Talk - 'The Future of GPS'
Thu - 11/6/08	*8:00am*	*40*	-	-	*Reception & Coffee Service in Lobby*
	8:40am	30	Ron Hatch	NavCom	'Agriculture and Other High Precision Applications'
	9:10am	30	Mark Petovello	Univ of Calgary	'Software Receivers, Multi-GNSS Signals and Impact on Applications'
	9:40am	30	Daniel Leaf	Northrop Grumman	'Multi-Mode Position Navigation & Time (MM-PNT)'
	10:10am	*10*	-	-	*Morning Break*
	10:20am	30	Col. Dave Madden	US Air Force - GPS Wing	GPSIII & OCX Development
	10:50am	30	Edward LeMaster	Lockheed Martin Tech Center	'Spacecraft Autonomy, Navigation, and Control Testbed'
	11:20am	30	Max Klein	Stanford - EE	PNT Education at Stanford
	11:50am	*60*	-	-	*Catered Lunch at SLAC Cafeteria*

Student Posters

#	Student / Post Doc	Dept	Title
1	Alan Chen	Aero Astro	Adaptive Sensing for Improving Detection of Unexploded Ordnances
2	John Conklin	Aero Astro	Mass Center Position Determination for Gravitational Reference Sensors
3	Carsten Barth	EE	A Low-Power Subsampling GPS Receiver Front-End
4	Andrew Smith	Aero Astro	Control of Heavy Lift Helicopter Teams
5	Catherine Kealhofer & Seth Foreman	Physics	Applications of a femtosecond electron point-source
6	Jiwon Seo	Aero Astro	Ionospheric Scintillation Effects on Aircraft Navigation using GPS and
7	Jason Hogan	Physics	Testing the Equivalence Principle by dropping atoms
8	Igor Teper	Physics	Backaction from Nondemolition Measurement of an Atomic Clock State in a Cavity