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

Schedule

- Oct. 21—All Day, plus Dinner
- Oct. 22—Morning

Hosts

- Per Enge
- Jim Spilker
- Mark Kasevich
- Sven Beiker
- Chris Gredes
- Tom Langenstein
- Jim Plummer

Invited Speakers

- **Brad Parkinson** — Real Origins and Essential Success Elements in Creating GPS
- **Dave Podlesney** — GPS III
- **Chong Cao** — Status of Compass (Beidou) Development
- **Ranwa Haddad** — Challenges from an Aquisition Perspective
- **Peter Brodie** — Evolution of GPS Payload
- **Leo Eldredge** — Backup Navigation for Aviation
- **Mike Pavloff** — EGNOS Implementation on SES's Sirius 5 Satellite
- **Jan Becker** — Driver Assistance and Autonomous Driving
- **Lt. Col. Michael Veth** — PNT Challenges for Unmanned Aerial Vehicles
- **Luca Delgrossi** — Positioning Challenges in Cooperative Vehicular Safety Systems
- **Alex Bayen** — Participatory sensing: Using smartphones to monitor traffic
- **Bill Bencze** — Iridium Navigation: iGPS
- **Thilo Koslowski** — Navigation and the Connected Vehicle
- **David DeLorenzo** — A Secure Civil GNSS for Today
- **Tom Kenny** — Advances in MEMS Technology
- **Philippe Bouyer** — Airborne Atom Sensors
- **Greg Turetzky** — Consumer Location; Beyond Sensitivity
- **Balaji Prabhakar** — It pays to do the right thing

Plus: *Student Poster Session*

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Polaris Wireless · QUALCOMM · Trimble

SPACE IS LIMITED to 160 Attendees! — RSVP Required

SCPNT

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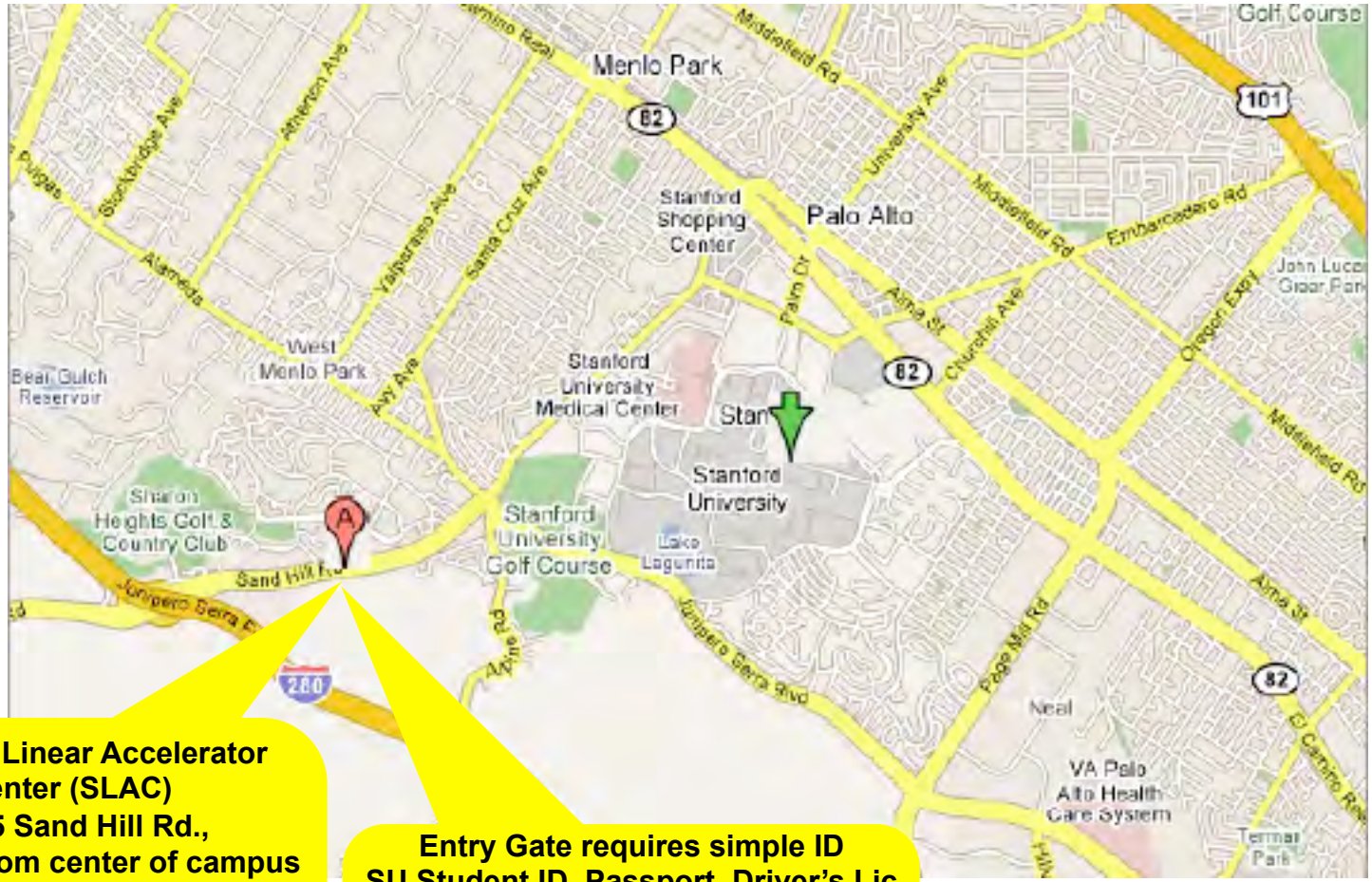
Stanford's 2009 PNT Challenges and Opportunities Symposium - 'R27'

Day / Date	~ Start Time	~mins w/ Q&A	Speaker	Affiliation	Title of Presentation
Wed 10/21/09	*8:00am*	*30*	-	-	*Reception & Coffee Service in Lobby*
	8:30am	10	Jim Plummer	Stanford Dean of Engineering	Opening Comments
	8:40am	45	Dave Podlesney	Lockheed Martin	GPS III
	9:25am	45	Chong Cao	China Technical Application Association for GPS	Status of Compass (Beidou) Development
	10:10am	*10*	-	-	*Morning Break*
	10:20am	30	Ranwa Haddad	Aerospace	Challenges from an Aquisition Perspective
	10:50am	30	Peter Brodie	ITT	Evolution of GPS Payload
	11:20am	30	Leo Eldredge	FAA	Backup Navigation for Aviation
	11:50am	*60*	-	-	*Catered Lunch at SLAC Cafeteria*
	12:50pm	30	David DeLorenzo	Zanio	A Secure Civil GNSS for Today
	1:20pm	30	Mike Pavloff	Space Systems Loral	EGNOS Implementation on SES's Sirius 5 Satellite
	1:50pm	30	Jan Becker	Bosch	Driver Assistance and Autonomous Driving
	2:20pm	*50*	-	-	*"Junior" Demonstration & Student Poster Session #1*
	3:10pm	30	Lt. Col. Michael Veth	Air Force Institute of Technology	PNT Challenges for Unmanned Aerial Vehicles
	3:40pm	30	Alex Bayen	UC Berkeley - Systems Engineering	Mobile Millennium, an example of participatory sensing: using smartphones to monitor traffic.
	4:10pm	30	Bill Bencze	Coherent Navigation	Iridium Navigation -- iGPS
	4:40pm	*45+*	-	-	*Student Poster Session #2*
	6:00pm	*120*	-	-	*Reception and Dinner at Faculty Club*
	7:30pm	30	Brad Parkinson	Stanford - Aero Astro	Dinner Talk - The Real Origins and Essential Elements of Success in Creating GPS
Thu 10/22/09	*8:00am*	*40*	-	-	*Reception & Coffee Service in Lobby*
	8:30am	10	Chris Gerdes	Stanford ME - Director of CARS	Opening Comments
	8:40am	30	Thilo Koslowski	Gartner - Managing VP - Automotive	Navigation and the Connected Vehicle
	9:10am	30	Luca Delgrossi	Mercedes-Benz	Positioning Challenges in Cooperative Vehicular Safety Systems
	9:40am	30	Tom Kenny	DARPA & Stanford ME	Advances in MEMS Technology
	10:10am	*10*	-	-	*Morning Break*
	10:20am	30	Philippe Bouyer	CNRS of France	Airborne Atom Sensors
	10:50am	30	Greg Turetzky	SiRF	Consumer Location; Beyond Sensitivity
	11:20am	30	Balaji Prabhakar	Stanford EE & CS	It pays to do the right thing
	11:50am	*60*	-	-	*Catered Lunch at SLAC Cafeteria*

Student Posters

#	Student / Post Doc	Dept	Title
1	Alan Chen	Aero Astro	Adaptive Sensing for Improving UXO Detection and Discrimination
2	Di Qui	Aero Astro	Robust Geotag Generation for Security Applications
3	Carsten Barth	EE	CMOS RF Notch Filter for GNSS receivers
4	Andrew Smith	Aero Astro	Control of Heavy Lift Helicopter Teams
5	Catherine Kealhofer & Seth Foreman	Physics	Ultrafast X-Ray Point Source for Space-Based Communications
6	Shankararaman Ramakrishnan	Aero Astro	Multi-Frequency Reconfigurable Embedded GNSS Receiver Development
7	Young Shin Park	Aero Astro	Enabling the LAAS Differentially Corrected Positioning Service (DCPS)

'PNT Challenges and Opportunities' Symposium
October 21st and 22nd, 2009

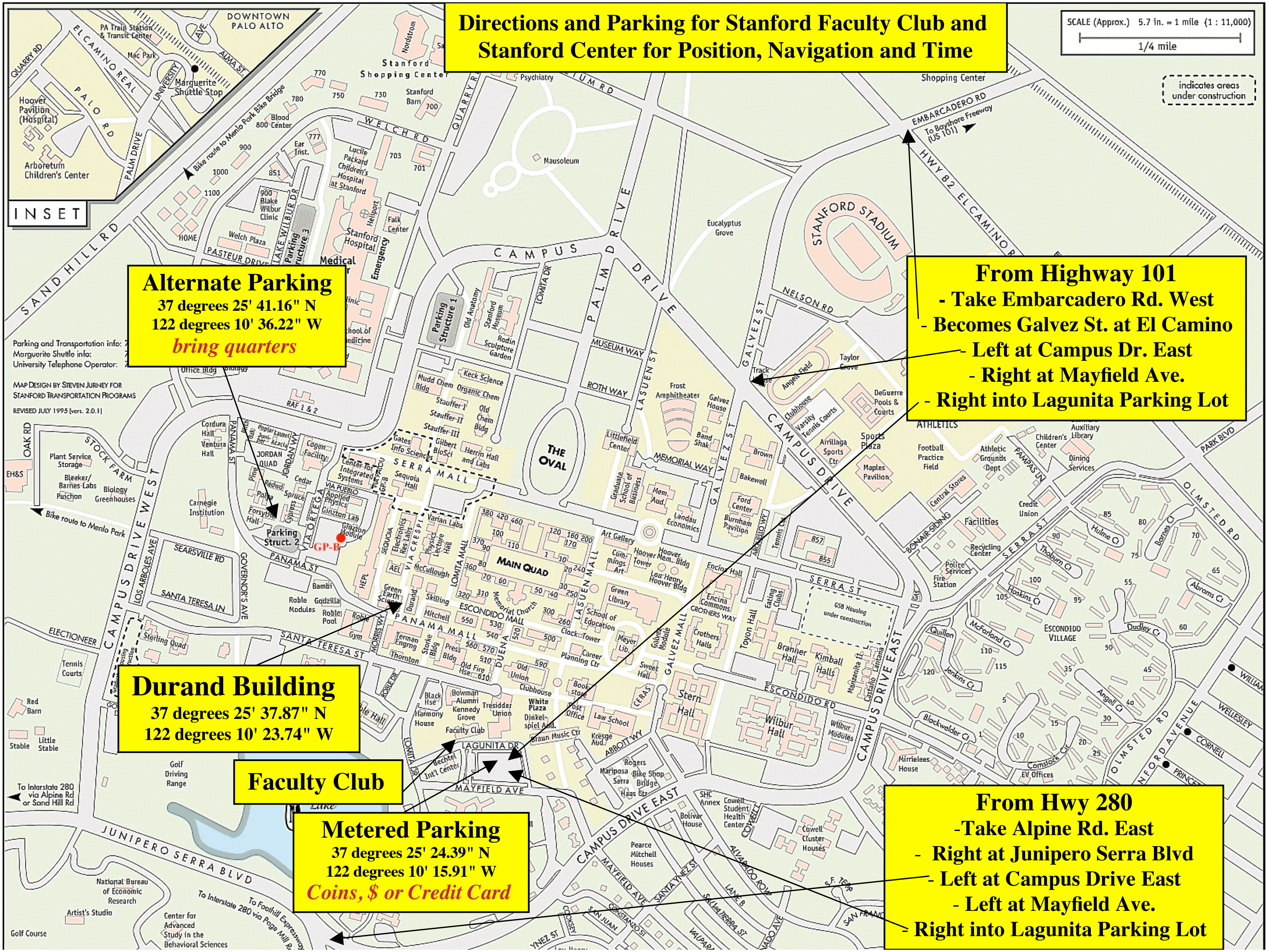


Stanford Linear Accelerator Center (SLAC)
2575 Sand Hill Rd.,
~ 2 miles from center of campus
-
37 degrees 25'12.28" N
122 degrees 12'18.54" W
-
From Hwy 280
take Sand Hill Rd east ~ 1/2 mile

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

Directions and Parking for Stanford Faculty Club and Stanford Center for Position, Navigation and Time



INSET
DOWNTOWN PALO ALTO
PA Train Station & Transit Center
Marguerite Shuttle Stop
Hoover Pavilion (Hospital)
Arboretum Children's Center
SCALE (Approx.) 5.7 in. = 1 mile (1 : 11,000)
1/4 mile
indicates areas under construction
Parking and Transportation info:
Marguerite Shuttle info:
University Telephone Operator:
MAP DESIGN BY STEVEN JURNEY FOR STANFORD TRANSPORTATION PROGRAMS
REVISED JULY 1995 (vers. 2.0.1)
SAND HILL RD
CAMPUS DRIVE
CAMPUS DRIVE WEST
CAMPUS DRIVE EAST
PALM DRIVE
JUNIPERO SERRA BLVD
EMBARCADERO RD
HWY 82 EL CAMINO
To Bayshore Freeway (US 101)
To Interstate 280 via Alpine Rd or Sand Hill Rd
To Interstate 280 via Page Mill Rd
To Foothill Expressway
Bike route to Menlo Park
STANFORD STADIUM
THE OVAL
MAIN QUAD
Stanford Shopping Center
Stanford Hospital
Parking Structure 1
Parking Structure 3
Parking Struct. 2
GP-B
Durand
Faculty Club
LAGUNITA DR
MAYFIELD AVE
Lake Lagunita
Golf Driving Range
Golf Course
Escondido Village

Alternate Parking
37 degrees 25' 41.16" N
122 degrees 10' 36.22" W
bring quarters

Durand Building
37 degrees 25' 37.87" N
122 degrees 10' 23.74" W

Faculty Club

Metered Parking
37 degrees 25' 24.39" N
122 degrees 10' 15.91" W
Coins, $ or Credit Card

From Highway 101
- Take Embarcadero Rd. West
- Becomes Galvez St. at El Camino
- Left at Campus Dr. East
- Right at Mayfield Ave.
- Right into Lagunita Parking Lot

From Hwy 280
- Take Alpine Rd. East
- Right at Junipero Serra Blvd
- Left at Campus Drive East
- Left at Mayfield Ave.
- Right into Lagunita Parking Lot