

**1st International Conference on Hyperloop Transportation and Related Technologies
LoopTransPort 2018**

July 23 – 24, 2018, Los Angeles, California

Monday, July 23 (Kerckhoff Hall)

08:00 – 08:30 **Registration** (Coffee, Tea, Light breakfast)

08:30 – 09:00 **Opening remarks** (Welcome from UCLA and HARP)

09:00– 09:30

Conference Keynote #1:

Marcel Jufer (École Polytechnique Fédérale de Lausanne, and Swissmetro)
From Swissmetro to Hyperloop

9:30 – 10:15

Session 1: Magnetic Levitation

- Ralph Blumberg (rLoop): Design of Permanent Magnets Based Passive Levitation Skis
- Ali-Imran Tayeb (SJSU): Spartan Hyperloop: A Halbach Array-Based Levitating Pod
- Takume Katsume (Keio U): Dynamic Stabilization of Hyperloop Pod Constrained Against 6 DOF Directions by Magnetic Forces

10:15 – 10:45

Invited Keynote: Sam Gurol (General Atomics, Director of Maglev Systems):
Electrodynamic Levitation Systems Development - from Urban to Rocket Maglev

10:45 – 11:15

Coffee Break

11:15 – 12:00

Session 2: Organizational Design, Innovation, and Feasibility

- Tom Lambot (rLoop): Rpod - An Active Levitation Hyperloop Prototype Designed and Built By The Crowd
- Al Florence (independent): Proven Management & Technical Processes and Procedures are Paramount for Project Success
- Perry Jia (UCSB): Consumer Desirability and Feasibility of the Hyperloop System

12:00 – 12:30

Invited Innovation Keynote: Pete Rahn (Secretary, Maryland Department of Transportation):
The Role of State Government in Innovative Transportation Infrastructure

12:30 – 14:00

Lunch (on your own, many nearby options)

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(Continued: Monday, July 23)

14:00 - 14:30

Invited Keynote: Yoshiaki Ohkami (Tokyo Institute of Technology, Keio University):
Beyond the Shin-kansen System – A Challenge of Japan to Realize Innovative Transportation Infrastructure

14:30 – 15:15

Session 3: Pod/Capsule Technology

- Denis Tudor (EPFL): High-power, High-speed Hyperloop Pod
- Kai Ohashi (Keio U): Position and Velocity Control of Keio Alpha Pod for Hyperloop Competition
- Amir Khan (rLoop): Aerodynamic Study of Multiple Pods in a Tube Using Automated Workflows

15:15 – 15:45

Coffee Break

15:45 – 16:15

Conference Keynote #2

Grover Burtney (Deputy Assistant Secretary for Transportation Policy, U.S. D.O.T.)
Hyperloop: View from US Department of Transportation

16:15 – 16:45

Plenary discussion: Future Priorities & Activities (Facilitator: Dane Egli, President Hyperloop Advanced Research Partnership)

16:45 – 17:00

Poster Introductions (1 minute by each lead author)

17:00 – 17:15

End-of-Day remarks

17:30 – 19:00

Poster Session and Reception (UCLA IPAM - Institute for Pure and Applied Mathematics)

- Juan Pablo Alatorre (Hyperloop W): Hyperloop West – Los Angeles to San Diego
- Nicholas Autobee (UCCS): HyperFalcos - The Fastest Bird Around
- Ralph Blumberg (rLoop): Design of Permanent Magnet Based Braking System for Hyperloop Vehicle
- Jackson Button (UCSB): Dynamic Characterization of Magnetic Levitation Engines
- Aaron Camere (rLoop): Design of a Li-ion Based Battery System with Very High Discharge Capability
- Arthur Chadwick (VCU): Zero to Finalist in Six Months
- Lukas Eschment (Emden-Leer U): The Transportation Vision of HyperpodX
- Al Florence (independent): Proven Management and Technical Processes and Procedures are Paramount for Project Success
- Christopher Mann (UT Austin): Texas Guadalupe - The Future of High Speed Transportation
- Mostafa Mobasher (Thornton Tomasetti): Infrastructure Security Challenges to Hyperloop: A Multi-Hazard and Vulnerability Analysis
- Ikuko Yasuoka (Tokyo City U): Aerodynamics on the POD of Team Keio Alpha

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Tuesday, July 24 (Engineering V, Room 2101)

08:00 – 08:45 **Coffee, Tea, Bagels/Muffins**

08:45 – 09:00 **Opening remarks**

09:00 – 9:30 **Invited Keynote:** Jesse Powell (Founder and President of Maglev Strategies, LLC)
Hyperloop Does Not Exist in a Vacuum: The Challenges and Opportunities of Putting Maglev in a Tube

09:30 – 10:15 **Session 4: Safety**

- Thomas Heaton (Cal Tech): Inertial Forces from Earthquakes on a Hyperloop Pod
- Mostafa Mobasher (Thornton Tomasetti): Infrastructure Security Challenges to Hyperloop: A Multi-Hazard and Vulnerability Analysis
- Ian Sutton (Sutton Tech Books): Hyperloop Safety Study

10:15 – 10:45 **Coffee Break**

10:45 – 11:30 **Session 5: Architecture and Economics**

- Brad Schwartzwelter (Amtrak): Understanding the “Over or Under” Question for Hyperloop Right-of-Ways
- Iman Ansari (UNLV): HYPER.STRUCTURE: Envisioning Hyperloop as an Urban Infrastructure
- Marta Nowak (UCLA): Hyperloop: Rethinking Long Distance Travel Through Architecture, Urban Design and Human Experience

11:30-12:00 **Invited Keynote:** Rick Geddes (Director, Cornell Program in Infrastructure Policy; Professor, Cornell University)
Finance and Funding Models for Hyperloop

12:00 – 12:15 **Closing Remarks**

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