



# Stanford's 2021 PNT Symposium - Invited Speakers

October 27th & 28th - *Virtually from Stanford*

	~ Start Time	~mins	Invited Speaker	Affiliation	Title of Presentation
<b>Wednesday 10/27</b>			<b>Introductions</b>		
<b>1</b>	8:00am	15	Walter, Todd & Lo, Sherman	Stanford University	Welome Comments & Announcements
<b>2</b>	8:15am	60	Parkinson, Brad	Stanford University, Emeritus	Toughen
<b>3</b>	9:15am	30	Hansen, Andrew	Department of Transportation, Volpe	Complementary PNT Evaluation
<b>4</b>	9:45am	30	Ladwig, Tonya	Lockheed Martin	The Future of Assured PNT
	10:15am	15	<b>Extra Question Time + Morning Break</b>		
<b>5</b>	10:30am	30	Opshaug, Guttorm	Qualcomm	Navigating using 5G
<b>6</b>	11:00am	30	Schwager, Mac	Stanford University	Robots that Work Together, Robots that Play Together
<b>7</b>	11:30am	30	Axelrad, Penina	Univ. of Colorado & NIST	Tracking Clustered CubeSat Deployments
	12:00 noon		End Day 1		
<b>Thursday 10/28</b>			<b>Reconvene</b>		
<b>8</b>	8:00am	30			
<b>9</b>	8:30am	30	Harari, Gabriella	Stanford University	Using Location data for Mental Health
<b>10</b>	9:00am	30	Frew, Eric	University of Colorado, Boulder	Control and Navigation of Unmanned Aircraft in Complex Atmospheric Phenomena
	9:30am	15	<b>Extra Question Time + Morning Break</b>		
<b>11</b>	9:45am	30	Burke, John	DARPA	Atomic frequency references and sensor
<b>12</b>	10:15am	30	Ely, Todd	NASA JPL	Deep Space Atomic Clock (DSAC)
<b>13</b>	10:45am	30	Pelgrum, Wouter	Blue Origin	Navigating to Space and Back at Blue Origin
	11:15pm		<b>Extra Question Time &amp; Conclusion of Symposium</b>		