

# ***AFOSR Program Kick-Off Agenda***

## ***Defense Enterprise Science Initiative (DESI)*** ***Topic 2: “Highly Maneuverable Autonomous UAV”***

***Lead PI: Prof. David Lentink***  
***Co-PI: Prof. Mark Cutkosky***  
***Stanford University***

***Industry Partner: Hayk Martirosyan***  
***Skydio Inc.***

***26 March 2019***  
***4100 North Fairfax Drive***  
***Arlington, VA 22203***

***SPONSORED BY:***



**Meeting Host:**

Les Lee (AFSOR)

**Chair:**

David Lentink (Stanford Univ.)

**Awardees:**

"(DESI'19) Super-Maneuverable Autonomous Pursuit: Peregrine Falcon vs Pigeon Inspired UAVs"

**Lead PI:** David Lentink (Stanford Univ.)

**Co-PI:** Mark Cutkosky (Stanford Univ.)

**Industry Partner:** Hayk Martirosyan (Autonomy Division, Skydio Inc.)

**Air Force Representatives:**

B.-L. ("Les") Lee (Air Force Office of Scientific Research), **PM**

Jean-Luc Cambier (Air Force Office of Scientific Research), **Co-PM**

Frederick Leve (Air Force Office of Scientific Research), **Co-PM**

Gregg Abate (Air Force Office of Scientific Research) - *Invited*

Patrick Bradshaw (Air Force Office of Scientific Research) - *Invited*

Aura Gimm (Air Force Office of Scientific Research) - *Invited*

Jay Tiley (Air Force Office of Scientific Research) - *Invited*

David Garner (European Office of Aerospace R&D) - *Invited*

Shad Reed (European Office of Aerospace R&D) - *Invited*

Douglas Smith (European Office of Aerospace R&D) - *Invited*

Jeffery Baur (Air Force Research Lab - AFRL/RXCCM)

Benjamin Dickinson (Air Force Research Lab - AFRL/RWWN)

James Joo (Air Force Research Lab - AFRL/RQVS)

Gregory Reich (Air Force Research Lab - AFRL/RQVC)

**DoD Representative:**

Esha Mathew (OUSD(R&E) Basic Research Office)

# AGENDA

**Tuesday, March 26**

**Kick-Off meeting for Defense Enterprise Science Initiative (DESI)  
Topic 2: “Highly Maneuverable Autonomous UAV”**

<b>Time</b>	<b>Speaker</b>	<b>Title of Project</b>
<b>08:50</b>		<i>Registration</i>
<b>Session Chair: Ben Dickinson (AFRL/RW)</b>		
<b>09:05</b>	<b>Les Lee</b> AFOSR	<i>Welcome &amp; Logistics</i>
09:15	<b>David Lentink</b> Stanford U	<i>Program Overview: Super-Maneuverable Autonomous Pursuit: Peregrine Falcon vs Pigeon Inspired UAVs</i>
09:45	<b>Mark Cutkosky</b> Stanford U	<i>Perching on the Wing: Strategies and Mechanisms for Robust Prehension of Moving Targets</i>
<b>10:15</b>	<b>Coffee</b>	<b>Break</b>
<b>Session Chair: James Joo (AFRL/RQ)</b>		
10:40	<b>Hayk Martirosyan &amp; Jack Zhu</b> Skydio	<i>Achieving Trustworthy Autonomous Flight in the Wild Based on Visual Perception</i>
11:20	<b>Will Roderick</b> Stanford U	<i>Birds Land Reliably on Complex Surfaces by Adapting Their Foot-Surface Interactions upon Contact</i>
11:40	<b>Eric Chang</b> Stanford U	<i>Design and Flight Testing of A Biohybrid Morphing Tail Aerial Robot</i>
<b>12:00</b>	<b>Lunch</b>	<b>Break</b>
<b>Session Chair: Greg Reich (AFRL/RQ)</b>		
13:30	<b>James Joo</b> AFRL/RQVS	<i>System Level Trade Study of A Variable Camber Morphing Aircraft Design</i>
13:55	<b>Ben Dickinson</b> AFRL/RWWN	<i>Articulated Head Missile Research</i>
14:20		<b>Open Discussion</b>
14:45	<b>Jean-Luc Cambier</b> AFOSR	<i>Closing Remark</i>
<b>15:00</b>	<b>Adjournment</b>	<b>Adjournment</b>

## MEETING WEBSITE

<https://community.apan.org/wg/afosr/w/researchareas/24493/2019-kick-off-meeting-for-desi-program-on-supermaneuverable-autonomous-pursuit/>

Including the information on the meeting registration, agenda, hotels and parking

## MEETING SITE

**Basic Research Innovation & Collaboration Center (BRICC)**

4100 North Fairfax Drive, Suite 450  
Arlington, VA 22203