

Burgers Program and Combustion Institute Summer School on Fire Safety Science – Wildland/WUI Fire Behavior

(University of Maryland, College Park, USA - June 5-9, 2023) <https://ssfss2023.umd.edu/>

The Burgers Program and Combustion Institute Summer School on Fire Safety Science – Wildland/WUI Fire Behavior will bring together graduate students, post-doctoral fellows, and early-career researchers and engineers, engaged in fire science, as well as distinguished instructors from leading higher-education institutions and research programs in fire safety around the world. The summer school will be held on the University of Maryland campus in College Park during the week of June 5-9, 2023. The program will be focused on the behavior of wildland fires and Wildland-Urban-Interface (WUI) fires and will adopt a viewpoint that is primarily (but not exclusively) engineering-based. The objectives of the summer school are to expose participants to a broad range of advanced topics relevant to wildland and WUI fires with a mix between fundamental courses that emphasize the underlying physical and chemical mechanisms and general courses that describe the scope of the real-world problem and emphasize current challenges in finding solutions to mitigate the negative impacts of large outdoor fires. The objectives are also to build a strong international network of graduate students, post-doctoral fellows, early-career researchers and engineers, instructors and leading researchers.

Draft Program

	AM (8:30 am-12:00 pm)	PM (1:30-5:00 pm)	End-of-the-day Events
Sunday (6/4/23)			<i>Welcome Reception</i>
Monday (6/5/23)	<ul style="list-style-type: none"> - Introduction to Wildland and Wildland-Urban-Interface Fires (A. Filkov) - Fire Behavior (A. Simeoni) 	<ul style="list-style-type: none"> - Ignition and Pyrolysis (S. Stoliarov) - Combustion (A. Trouvé) 	
Tuesday (6/6/23)	<ul style="list-style-type: none"> - Flame Spread (S. McAllister) - Smoldering (G. Rein) 	<ul style="list-style-type: none"> - Firebrands (M. Gollner) - Soot and Radiation (P. Sunderland) 	<i>UMD/FPE Laboratory Visit</i>
Wednesday (6/7/23)	<ul style="list-style-type: none"> - Fire Ecology (<i>TBD</i>) - Fire and Weather (<i>TBD</i>) 	<ul style="list-style-type: none"> - Human Behavior in WUI fires (E. Kuligowski) - Fire Spread in Communities (D. Rush) 	<i>Poster Session</i>
Thursday (6/8/23)	<ul style="list-style-type: none"> - Extreme Fires (D. Viegas) - Rate-Of-Spread Models (M. Finney or J. Forthofer) 	<ul style="list-style-type: none"> - Computational Fluid Dynamics Modeling (D. Morvan) - Regional-Scale Modeling (C. Lautenberger) 	
Friday (6/9/23)	<ul style="list-style-type: none"> - Technology: Remote Sensing; Emberometer; Real-Time Fire Forecasting 	<ul style="list-style-type: none"> - Panel Discussion on Current Challenges in Large Outdoor Fires 	<i>Farewell Reception</i>

Current list of instructors (in order of appearance in the program)

- Alex Filkov (University of Melbourne, Australia)
- Albert Simeoni (Worcester Polytechnic Institute, USA)
- Stas Stoliarov (University of Maryland, USA)
- Arnaud Trouvé (University of Maryland, USA)
- Sara McAllister (USDA Forest Service, USA)
- Guillermo Rein (Imperial College London, UK)
- Michael Gollner (University of California Berkeley, USA)
- Peter Sunderland (University of Maryland, USA)
- Erica Kuligowski (RMIT University, Australia)
- David Rush (University of Edinburgh, UK)
- Domingos Viegas (University of Coimbra, Portugal)
- Mark Finney or Jason Forthofer (USDA Forest Service, USA)
- Dominique Morvan (Aix Marseille University, France)
- Chris Lautenberger (Reax Engineering, USA)