

IAU Symposium 357: White Dwarfs as Probes of Fundamental Physics and Tracers of Planetary, Stellar & Galactic Evolution. October 21-25, 2019. Hilo, Hawai'i

## Sunday, October 20

17:00	Welcoming Reception and Registration (17:00-19:00)
-------	--

## Monday, October 21

8:00	Conference Registration (also available during Welcoming Reception)
9:00	Welcome – Scot Kleinman
9:15	Opening Intro – Martin Barstow
9:30	Ashley Ruitter (Invited Talk) <b>SN Ia Progenitors</b>
9:45	<i>Type Ia supernova sub-classes and progenitor origin</i> Chair: Scot Kleinman
10:00	A. Cikota - <i>Investigating Progenitors of Type Ia Supernovae using Spectropolarimetry</i>
10:15	E. Bauer - <i>Thermonuclear Supernovae and White Dwarf Pollution</i>
10:30	Coffee Break
10:45	
11:00	Carles Badenes (Invited Talk) <b>SN Ia Progenitors</b>
11:15	<i>Binary White Dwarfs as Type Ia SN Progenitors</i> Chair: Scot Kleinman
11:30	Y. Zenati - <i>The Origin of Standard Thermonuclear Supernovae from Hybrid White Dwarf Mergers</i>
11:45	E. Wilson - <i>Convection in Common Envelopes and the formation of Double White Dwarfs</i>
12:00	Lunch
12:15	
12:30	
12:45	
13:00	
13:15	
13:30	N. Hallakoun - <i>Characterizing the local double white dwarf population</i> Chair: Sandy Leggett
13:45	J.J. Hermes - <i>Paparazzi lightning: 68 million images of white dwarfs from space</i>
14:00	J. Barnett - <i>Double Degenerates in the Open Cluster NGC 6633</i>
14:15	C-H. Lee - <i>ANTARES: a community broker to digest the LSST firehose</i>
14:30	T. Prince - <i>Observations of short period white dwarf systems with the Zwicky Transient Facility</i>
14:45	S. Cheng - <i>The Delayed Evolution of High-mass White Dwarfs: a Cooling Anomaly and Double-White-Dwarf Mergers</i>
15:00	Discussion
15:15	Moderator - Martin Barstow
15:30	Coffee Break
15:45	
16:00	Eva Villaver (Invited Talk) <b>Debris from Extrasolar Planetary Systems</b>
16:15	<i>Planetary Pieces: Putting All the Clues Together Using White Dwarfs</i> Chair: Sandy Leggett
16:30	A. Doyle - <i>Exoplanetary Oxygen Fugacities from Polluted White Dwarf Stars</i>
16:45	M. Kissler-Patig - <i>An HST imaging search for giant planets around the 7 white dwarfs in the Hyades cluster (H. Zinnecker)</i>
17:00	T. Dupuy - <i>Orbit and Dynamical Mass of a White Dwarf in a Planet-Hosting Binary System</i>
17:15	Discussion
17:30	Moderator - Lillia Ferrario
17:45	Bonus Talk
18:00	A. Grace - <i>Maunakea and Hawaii Culture: Then and Now</i>

IAU Symposium 357: White Dwarfs as Probes of Fundamental Physics and Tracers of Planetary, Stellar & Galactic Evolution. October 21-25, 2019. Hilo, Hawai'i

## Tuesday, October 22

9:00	Chris Manser (Invited talk)	<b>Debris from Extrasolar Planetary Systems</b>
9:15	<i>Remnant planetary systems around white dwarfs</i>	Chair: Paula Szkody
9:30	L. Rogers - <i>Infrared variability around planetesimal-eating white dwarfs</i>	
9:45	K. Bell - <i>The Search for Transiting Planets and Planetesimals with the Zwicky Transient Facility</i>	
10:00	M. Kissler-Patig - <i>Planets around white dwarfs as seen by the TESS mission</i>	
10:15	M. Coleman - <i>White Dwarfs as Accretion disk laboratories</i>	
10:30	Coffee Break	
10:45		
11:00	D. Wilson - <i>Discovery of an Irradiated Brown Dwarf Companion to a White Dwarf</i>	
11:15	J. Krzesinski - <i>Searching for Low-mass Companions Around White Dwarfs and Subdwarfs from Kepler field.</i>	
11:30	Discussion	
11:45	Moderator - Siyi Xu	
12:00	Conference Photo	
12:15		
12:30	Lunch	
12:45		
13:00		
13:15		
13:30	Susana Landau (Invited Talk)	<b>Fundamental Physics</b>
13:45	<i>Variation of fundamental constants</i>	Chair: JJ Hermes
14:00	D. Winget - <i>Understanding spectra from white dwarf photospheres: benchmarking the atomic physics</i>	
14:15	X. Chen - <i>Extremely low-mass white dwarfs in double degenerates: Formation and Significance for LISA</i>	
14:30	B. Dunlap - <i>Learning about Line Shapes and Masses from Gaia Parallaxes</i>	
14:45	L. McNeill - <i>Probing white dwarf structure with LISA: using gravitational waves for asteroseismology</i>	
15:00	L. Tchang-Brillet - <i>Laboratory studies of VUV emission spectra of heavy element ions</i>	
15:15	P. Tremblay - <i>Neutral Helium Line Profiles through the Simulation of Local Interactions in White Dwarfs</i>	
15:30	Coffee Break	
15:45		
16:00	Adela Kawka (Invited Talk)	<b>Fundamental Physics</b>
16:15	<i>The origin and properties of magnetic white dwarfs</i>	Chair: JJ Hermes
16:30	F. Hardy - <i>A New Look at Magnetic White Dwarfs</i>	
16:45	S. Kalita - <i>Continuous gravitational wave from magnetized compact objects</i>	
17:00	K. Burdge - <i>The shortest period eclipsing binary</i>	
17:15	P. Bera - <i>Quasi-periodic oscillations from post-shock accretion column of strongly magnetized accreting white dwarfs</i>	
17:30	Discussion	
17:45	Moderator - S. O. Kepler	

## Wednesday, October 23

9:00	Alejandro Córscico (Invited Talk)	<b>Precision Studies of White Dwarf Structure</b> Chair: Agnes Kim
9:15	<i>White dwarf asteroseismology</i>	
9:30	H. Shipman - <i>40 Years of Pulsating White Dwarfs</i>	
9:45	F. de Geronimo - <i>Evolution and asteroseismology of ultra-massive white dwarfs.</i>	
10:00	A. Kim - <i>Validation of Asteroseismic fitting with the new White Dwarf Evolution Code</i>	
10:15	J. den Hartogh - <i>Using asteroseismically obtained core rotation rates of low and intermediate mass stars to investigate slow neutron capture nucleosynthesis</i>	
10:30	Coffee Break	
10:45		
11:00	P. Skody - <i>Accreting, Pulsating WDs: Probing Heating and Rotation</i>	
11:15	Z. Vanderbosch - <i>A Ground-Based Detection of an Outbursting DBV White Dwarf</i>	
11:30	S. Charpinet - <i>The chemical structure of the hot pulsating DB white dwarf KIC 08626021 from asteroseismology</i>	
11:45	B. Castanheira - <i>Asteroseismology of white dwarfs observed by Kepler and K2</i>	
12:00	Excursion	
19:00	Public Talk at 'Imiloa Astronomy Center M. Barstow - <i>What has space done for us?</i>	

IAU Symposium 357: White Dwarfs as Probes of Fundamental Physics and Tracers of Planetary, Stellar & Galactic Evolution. October 21-25, 2019. Hilo, Hawai'i

## Thursday, October 24

9:00	M. Tucker - <i>Gone But Not Forgotten: A Decade of Archival GALEX Data Reveals a Multitude of Variable White Dwarfs</i>	
9:15	O. Vincent - <i>Searching for ZZ Ceti white dwarfs in the Gaia survey</i>	Chair: Elizabeth Jeffery
9:30	J. Provencal - <i>White Dwarfs and Convection</i>	
9:45	Discussion	
10:00	Moderator - <i>Barbara Castanheira-Endl</i>	
10:15		
10:30	Coffee Break	
10:45		
11:00	Paola Marigo (Invited Talk)	<b>Stellar Physics and Galactic Evolution</b>
11:15	<i>What can we learn from the initial-final mass relation of white dwarfs?</i>	Chair: Elizabeth Jeffery
11:30	M. Hajduk - <i>Real time evolution of post-AGB stars</i>	
11:45	L. Löbbling - <i>(Pre)-white dwarf stars as measuring tools for yields of asymptotic giant branch nucleosynthesis</i>	
12:00	Lunch	
12:15		
12:30		
12:45		
13:00		
13:15		
13:30	Jordi Isern (Invited Talk)	<b>Stellar Physics and Galactic Evolution</b>
13:45	<i>White dwarfs as Advanced Physics laboratories: the axion case</i>	Chair: Patrick Dufour
14:00	T. Oswalt - <i>The Completeness of Gaia-Selected Samples of White Dwarfs—Are We There Yet?</i>	
14:15	K. Williams – <i>Ensemble Evolutionary Studies of White Dwarfs</i>	
14:30	N. Lagarde - <i>New population synthesis approach: the golden path to constrain</i>	
14:45	T. von Hippel - <i>White Dwarfs, Gaia, and the Age of the Galactic Disk</i>	
15:00	Coffee Break	
15:15		
15:30	E. Jeffery - <i>A Bayesian Analysis of White Dwarfs in Open Clusters Observed with Gaia</i>	
15:45	N. Fantin - <i>Measuring the Star Formation of the Milky Way Using its Stellar Graveyard</i>	
16:00	S.O. Kepler - <i>Mass distribution of white dwarfs</i>	
16:15	T. Heintz - <i>Comparing the Total Ages of Wide Double White Dwarfs in Gaia DR2</i>	
16:30	Discussion	
16:45	Moderator - <i>Judi Provencal</i>	
17:00	Break before dinner	
17:15		
17:30	Leave for dinner	

IAU Symposium 357: White Dwarfs as Probes of Fundamental Physics and Tracers of Planetary, Stellar & Galactic Evolution. October 21-25, 2019. Hilo, Hawai'i

## Friday, October 25

9:00	V. Suleimanov - <i>Statistics of white dwarf properties in intermediate polars</i>	Chair: Atsuko Nitta
9:15	P. Muralimohan - <i>Geometry of nova ejecta</i>	
9:30	N. Finch - <i>What can ISM and non-photospheric highly ionised lines in WD spectra reveal about the beta CMa tunnel?</i>	
9:45	A. Bedard - <i>The spectral evolution of hot white dwarfs</i>	
10:00	T. Rauch - <i>Heavy-metal white dwarfs</i>	
10:15	N. Gentile Fusillo - <i>Cool white dwarfs as standards for infrared observations</i>	
10:30	Coffee Break	
10:45		
11:00	S. Blouin - <i>The Spectral Evolution of Cool White Dwarfs</i>	
11:15	P. Dufour - <i>Origin and evolution of carbon atmosphere white dwarf stars</i>	
11:30	H. Richer - <i>The White Dwarf That Has Everything</i>	
11:45	K. Masuda - <i>Discovery of four white dwarfs in self-lensing binaries</i>	
12:00	Lunch	
12:15		
12:30		
12:45		
13:00		
13:15		
13:30	B. Kayastha - <i>Dynamical Evolution of Globular Clusters with White Dwarfs, Neutron Stars and Black Holes using the GPU supercomputer</i>	Chair: Gerald Handler
13:45	M. Hollands - <i>A white dwarf of spectral type DAQ</i>	
14:00	E. Cukanovaite - <i>Calibration of the mixing length parameter for DB and DBA white dwarf based on 3D atmospheric models</i>	
14:15	T. Cunningham - <i>From hydrogen to helium: the convectively driven spectral evolution of white dwarfs</i>	
14:30	Closing Review	
14:45		
15:00	Discussion	
15:15	Moderator - Lillia Ferrario	
15:30		
15:45	Coffee Break	
16:00		