Kepler/K2 Science Conference IV Program

Version 1, May 6 2017

Monday, June 19

Session 1	*Kepler & K2 Updates*
8:00-9:00	Press Conference
9:00-9:15	Welcome to Ames & Logistics
9:15-9:30	Jessie Dotson: K2 Project Status & Future Opportunities
9:30-10:00	Susan Thompson (invited): Kepler's Final Exoplanet Catalog
10:00-10:30	*Coffee Break*
Session 2	*Benchmark Systems from Kepler/K2*
10:30-11:00	Jason Rowe (invited): Interesting benchmark systems from Kepler/K2
11:00-11:15	Rodrigo Luger: K2 unveils a seven-planet resonant chain in TRAPPIST-1
11:15-11:30	Songhu Wang: Improved Masses for the Potentially Habitable TRAPPIST-1 Planets
11:30-11:45	Courtney Dressing: Characterizing K2 Planetary Systems Orbiting Cool Dwarfs
11:45-12:00	Andrew Vanderburg: HARPS-N Observations of K2 Planet Candidates and Planet Masses in the WASP-47 System
12:00-13:30	*Lunch Break*
Session 3	*Asteroseismology of Solar-Like Oscillators*
13:30-14:00	Dennis Stello (invited): The asteroseismic revolution of red giant stars: from stellar interiors to the structure of the Milky Way
14:00-14:15	Matteo Cantiello: Asteroseismic Signatures of Evolving Internal Stellar Magnetic Fields
14:15-14:30	Enrico Corsaro: Spin alignment of stars in old open clusters
14:30-14:45	Jamie Tayar: Core and Surface Rotation Rates of Evolved Intermediate Mass Stars
14:45-15:00	Kevin Schlaufman: Joint Spectroscopic and Asteroseismic Analysis of Very Metal-poor Stars in the Kepler Field
15:00-15:30	*Coffee Break*
Session 4	*Exoplanets & Stars*
15:30-15:45	Erik Petigura: The California Kepler Survey: High-Resolution Spectroscopy of 1305 Stars Hosting Transiting Planets
15:45-16:00	Rob Wittenmyer: Revised radius estimates for K2 planet candidates from AAT/HERMES

16:00-16:15 Tim Bedding: Surface Gravities for 15,000 Kepler Stars measured from Stellar Granulation
16:15-16:30 Emily Sandford: Know the Planet, Know the Star: Precise Stellar Parameters with Kepler
16:30-16:45 Rachel Matson: Stellar companions of K2 Exoplanet Candidate Host Stars
16:45-17:00 Lea Hirsch: Assessing the Effect of Stellar Companions to Kepler Objects of Interest

17:00-tbd Poster Session I

Tuesday, June 20

Session 1 Extragalactic & Solar System Science
8:30-9:00 Armin Rest (invited): High-cadence Light Curves of Transients from the Kepler Telescope
9:00-9:15 Brad Tucker: The Kepler Supernova Cosmology Experiment - C16 and C17
9:15-9:30 Erin Ryan: K2's Keys to the Solar System: Lightcurves of Trojan and Hilda Asteroids
9:30-9:45 Miguel de Val-Borro: K2 photometry of comet 67P/Churyumov-Gerasimenko
9:45-10:00 Carey Lisse: K2 Observations of the Pluto-Charon System

10:00-10:30 Coffee Break

Session 2 Exoplanet Formation & Evolution
10:30-11:00 Ruth Murray Clay (invited): Planet formation and evolution: Implications for planetary compositions
11:00-11:15 Aaron Rizzuto: The Exoplanet Migration Timescale from K2 Young Clusters
11:15-11:30 John Brewer: Beyond Metallicity: Chemical Tracers of Planet Formation
11:30-11:45 Samuel Grunblatt: Re-Inflated Planets Orbit Evolved Stars: Toward Solving a 17-Year-Old Puzzle in Exoplanet Science
11:45-12:00 Vincent van Eylen: Planets around evolved stars: formation or evolution?

12:00-13:30 Lunch Break

Session 3 Exoplanet Formation & Evolution (cont'd) + Microlensing
13:30-13:45 James Owen: Evaporation Of Close-in Planets: The "Evaporation Valley"
13:45-14:15 Calen Henderson (invited): K2's Campaign 9: The First Automated Microlensing Survey from the Ground and from Space
14:15-14:30 Wei Zhu: K2C9 Early Science Results and Synergy with Spitzer Microlensing

14:30-14:45 Radek Poleski: K2 observations of microlensing superstamp in Campaign 9 and selected targets in Campaign 11
14:45-15:00 Matthew Penny: Forward Model Photometry of K2 Crowded Field Data

15:00-15:30 Coffee Break

Session 4 Galactic Archeology
15:30-16:00 Jennifer Johnson (invited): Peering into the past: Galactic Archaeology with Kepler and K2
16:00-16:15 Joel Zinn: Mind the GAP: A 360 degree view of the Galaxy with the K2 Galactic Archaeology Program
16:15-16:30 Victor Silva Aguirre: Age dissection of the Milky Way disk using asteroseismology
16:30-16:45 Marc Pinsonneault: Asteroseismology and Spectroscopy for a Large Sample of Kepler Dwarfs and Subgiants
16:45-17:00 Ruth Angus: The ages of K2 dwarfs

tbd Public talk: An Evening with the Storytellers (Nadia Drake, Dennis Overbye, Mike Lemonick)

Wednesday, June 21

Session 1 Asteroseismology of Classical Pulsators
8:30-9:00 Conny Aerts (invited): Asteroseismology of Hot Stars
9:00-9:15 Timothy van Reeth: The interior rotation of intermediate-mass stars
9:15-9:30 Timothy White: Beyond the K2 bright limit: variability in the brightest stars in the ecliptic
9:30-9:45 László Molnár: The K2 RR Lyrae and Cepheid Survey: hunting for pulsating stars, near and far
9:45-10:00 JJ Hermes: Evidence from K2 for rapid rotation in the descendant of an intermediate-mass star

10:00-10:30 Coffee Break

Session 2 Exoplanet Occurrence Rates
10:30-11:00 Chris Burke (invited): Terrestrial Planet Occurrence Rates From Kepler: Past, Current, and Future
11:00-11:15 Danley Hsu: Characterizing Kepler Planet Occurrence Rates Using Approximate Bayesian Computation
11:15-11:30 Ian Crossfield: Crowd-sourced Planet Occurrence: Citizen Science with K2
11:30-11:45 Steve Bryson: Science Yield from the Kepler Certified False Positive Table
11:45-12:00 Adam Kraus: The Ruinous Impact of Close Binary Companions on Planetary Systems

12:00-13:30 Lunch Break

Session 3 Breakout Sessions Part I

13:30-15:00 Kepler Occurrence Rate Hack (Natalie Batalha)
13:30-15:00 Speed-Dating with TESS (Tom Barclay)
13:30-15:00 Gaussian Processes (Daniel Foreman-Mackey)

15:00-15:30 Coffee Break

Session 4 Breakout Sessions Part II

15:30-17:00 Kepler Occurrence Rate Hack (Natalie Batalha)
15:30-17:00 NASA Exoplanet Exploration Program Update (Karl Stapelfeldt)
15:30-17:00 EVEREST Tutorial and Hack Session (Rodrigo Luger)

17:00-21:00 Kepler Closeout Commemoration

Thursday, June 22

Session 1 Exoplanet Compositions

8:30-9:00 Angie Wolfgang (invited): The Mass-Radius "Relation" and the Diversity of Exoplanet Compositions
9:00-9:15 Eric Lopez: Predictions for the Transition Between Rocky Super-Earths and Gaseous Sub-Neptunes
9:15-9:30 BJ Fulton: The California-Kepler Survey. III. A Gap in the Radius Distribution of Small Planets
9:30-9:45 Tsevi Mazeh: The Planetary Mass-Radius Relation and its Dependence on Orbital Period as Measured by Transit Timing Variations and Radial Velocities
9:45-10:00 Luca Malavolta: Kepler-9 and Kepler-19: two pivotal systems that reconcile RV and TTV mass determinations

10:00-10:30 Coffee Break

Session 2 Rotation, Activity & Clusters

10:30-11:00 Luisa Rebull (invited): Stellar Rotation in Clusters with K2
11:00-11:15 Rebecca Esselstein: Determining the Rotation Periods of M67 and Their Implications on Stellar Evolution from K2 Data
11:15-11:30 Jason Curtis: The K2 Survey of Ruprecht 147
11:30-11:45 James Davenport: Stellar flare rate evolution revealed by Kepler
11:45-12:00 Hiroyuki Maehara: Starspot activity and superflares on solar-type stars

12:00-13:30 Lunch Break

Session 3 *Rotation, Activity & Clusters*

13:30-14:00 Jennifer van Saders (invited): Kepler's Insights into Angular Momentum Evolution
14:00-14:15 Gibor Basri: Direct Signatures of Differential Rotation on Active Kepler Stars
14:15-14:30 Michael Gully-Santiago: Physical properties of starspots
14:30-14:45 Ben Montet: Observing Stellar Activity Cycles with Kepler
14:45-15:00 David Ciardi: Variable Variability: Understanding How Stars Vary from 4 years of Kepler Data

15:00-15:30 *Coffee Break*

Session 4 *Dynamics, Architectures & Binaries*

15:30-15:45 Gongjie Li: Uncovering Circumbinary Planetary Architectural Properties from Selection Biases
15:45-16:00 Dan Fabrycky: Differing Tidal Dissipation in exo-Earths, Super-Earths, and Sub-Neptunes from Resonant Chains of Planets
16:00-16:15 Daniel Jontof-Hutter: Outer Architecture of Kepler-11: Constraints from Coplanarity
16:15-16:30 Jerome Orosz: Kepler Triple Systems and Tidal Apsidal Structure Constants for Low Mass Stars
16:30-16:45 Avi Shporer: Radial velocity monitoring of Kepler heartbeat stars
16:45-17:00 Jim Fuller: Resonance Locking of Tidally Excited Pulsations in the Heartbeat Star KIC8164262

17:00-tbd *Poster Session II*

Friday, June 23

Session 1 *Exoplanet Compositions + Dynamics, Architectures & Binaries (cont'd)*

8:30-8:45 Evan Sinukoff: Small Planet Masses and Compositions from K2
8:45-9:00 William Cochran: Small planets from K2: Rocky or Gaseous?
9:00-9:15 Lauren Weiss: The California Kepler Survey V: Stellar and Planetary Properties of Kepler's Multiplanet Systems
9:15-9:30 Michael Werner: Spitzer Meets K2 - A Status Report
9:30-9:45 Sarah Millholland: A Systematic Search for Kepler Non-Transiting Hot Jupiters with Phase Curves
9:45-10:00 Bill Welsh: Non-Transiting Circumbinary Planets: Kepler's Hidden Gift

10:00-10:30 *Coffee Break*

Session 2 *Rotation, Activity & Clusters (cont'd) + Other topics*

10:30-10:45 Raphaëlle Haywood: Addressing stellar activity at every step in the HARPS-N RV follow-up of Kepler and K2 systems

10:45-11:00 Fabienne Bastien: Space-Based Light Curves as Predictors of Good Radial Velocity Planet Search Targets
11:00-11:15 Christina Hedges: Hunting for Dippers with Supervised Machine Learning
11:15-11:30 Valeri Makarov: Astrometry with Kepler: prospects and lessons learned
11:30-11:45 Flavien Kiefer: KIC8462852: boosting up the exocomet fragments model
11:45-12:00 Poster competition winners

12:00-13:30 Lunch

Session 3 Future & Outlook
13:30-14:00 Eric Mamajek (invited): Kepler/K2 in the Context of Future Exoplanet Missions
14:00-14:15 George Ricker: Unlocking the Secrets of Nearby Exoplanets with the Transiting Exoplanet Survey Satellite
14:15-14:30 Jessie Christiansen: TESSting the Waters: Coordinating the characterisation of HD 3167 as a learning experience for TESS follow-up
14:30-15:00 Dave Latham (invited): Kepler & K2 Highlights and Future Outlook

15:00 End of Conference