

Fermi Summer School 2013

Schedule ([pdf](#))

Week 1

	Tues May 28	Wed May 29	Thu May 30	Fri May 31	Sat June 1
9:00	The Fermi Mission Julie McEnery	Diffuse Emission and Map Making - Doug Finkbeiner	Radiative Processes in High-Energy Astrophysics - Lukasz Stawarz	Dark Matter in Fermi II (Part 1) - Savvas Koushiappas	Dark Matter in Fermi II (Part 2) - Savvas Koushiappas
10:00	Space-based Gamma-ray Astronomy (pptx with extra notes) Liz Hays	Fermi LAT overview Eric Charles	Dark Matter in Fermi I - Doug Finkbeiner	Ground-based Gamma-ray Astronomy - Deirdre Horan	Particle Acceleration in High-Energy Astrophysics - Lukasz Stawarz
Break					
11:30	Gamma-ray Sources Elizabeth Ferrara	Student Talks	LAT Performance Eric Charles	Student Talks	Student Talks
Lunch					
1:30pm	Maximum Likelihood Overview Sample code: - errors_poisson.py - lima.py - conf_lima_1d.py - ul_lima_1d.py - ul_bayes_lima_1d.py S. Fegan Science Tools Intro and Data Exploration J. Perkins	Likelihood in the LAT Animation: - map_z100_ss20noX.gif S. Fegan Installing Python Packages Likelihood Tutorial J. Perkins	LAT effective area Eric Charles LAT XML Models E. Ferrara Advanced Likelihood J. Perkins		

Week 2

	Mon June 3	Tues June 4	Wed June 5	Thurs June 6	Fri June 7
9:00	Particle Acceleration in High-Energy Astrophysics (continued) - Lukasz Stawarz	Galactic Cosmic Rays Probed with Fermi-LAT - Lukasz Stawarz	GRB Observations and Follow-up by Swift - Neil Gehrels	Extragalactic Cosmic Rays Probed with Fermi-LAT - Lukasz Stawarz	Final Wrap-up: Project Results and Feedback
10:00	Gamma-ray Pulsars - Tyrel Johnson	Intro to Blazars - Deirdre Horan	Fermi GBM and LAT GRB Highlights - Judy Racusin	Gamma Rays and Multimessengers - Valerie Connaughton	Final Wrap-up: Project Results and Feedback
Break					
11:30	Student Talks	Ground-based Gamma-ray Astronomy II (compressed) - Petra Huentemeyer	The Fermi Gamma-ray Burst Monitor - Valerie Connaughton	Early Results from the HAWC Observatory - Petra Huentemeyer	Fermi and Beyond - Liz /Julie/Jamie
Lunch					
1:30pm	Lightcurves and Variability (Steve) Pulsars and Off-pulse analysis (Tyrel)	Student Talks and One-Slide Summaries Observation modes - a closer look at sky survey and pointings (animated gif of a crab observation)(Julie) Allsky analysis	Student Talks and One-Slide Summaries GRB Analysis - Valerie Associated rmfit tutorial Extended source analysis	Student One-Slide Summaries Finishing touches LAT GRB	

Student Talks

Wednesday May 29

Katie Auchettl - [Fermi-LAT observations of Galactic supernova remnant Kesteven 79](#)

Hao Zhou - [Morphology and Energy Spectra of Geminga and Boomerang at TeV Energies](#)

Hugo Ayala - [Studying the Diffuse Gamma-Ray Emission from the Cygnus Region with HAWC and Fermi](#)

Friday May 31

Ryan Abrahams - [Dark Gas in the Translucent Cloud MBM 12](#)

Fabio Zandanel - [Dark Matter and Cosmic Rays in Clusters of Galaxies](#)

Saturday June 1

Naoya Hidaka - [SIPM Characterization for CTA](#)

Hao-Ning He - [Diffuse PeV neutrino emission from Ultra-Luminous Infrared Galaxies](#)

Monday June 3

Karsten Barger - [Low peaked and high peaked BL Lacertae objects \(ppt\)](#)

Felicia Krauss - [Multiwavelength observations of TANAMI sources](#)

Victor Patiño - [A Multiwavelength Photometric and Spectroscopic Cross-Correlation Variability Study of Fermi/LAT Blazars](#)

Tuesday June 4

Zhengwei Li - [Constraints on annihilating dark matter from Fermi observations of M31 \(ppt\)](#)

Wednesday June 5

Rui-zhi Yang - [Constraining the distribution of dark matter in the inner Galaxy: The case of the 130 GeV Line \(keynote\)](#)

Thursday June 6

Xiang Li - [A brief introduction to the DAMPE satellite](#)

One Slide Summaries (Tues/Wed/Thurs)

Eric Albin

Simon Archambault

Thomas Armstrong

Josefa Becerra Gonzalez

Micaela Caragiulo

Scott Griffiths

Jeremy Hare (ppt)

Payel Kar (ppt)

Stephen Portillo

Jean-Francois Rajotte

Bei Zhou

Jianeng Zhou (ppt)