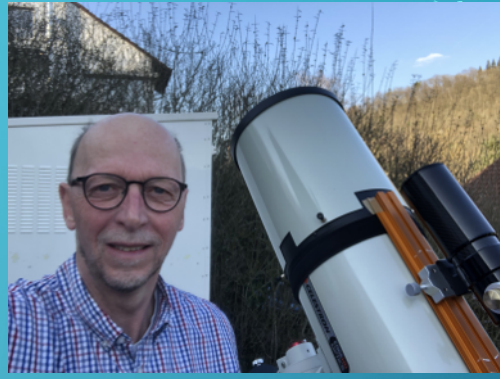

IceBreaker Session
5th Astro-COLIBRI workshop



DR. BERND CHRISTENSEN – ABOUT ME

- Born in 1959, married, 2 adult daughters, retired
- Got my first “Quelle” telescope at age 13, I am hooked on astronomy ever since ☺
- Studied physics, worked in industry, lived in foreign countries several times
- In 1995, I resumed my hobby of astronomy, both visual and photographic:
  - The night sky and the night as an experience never cease to fascinate me
  - I'm really into wide-field deep-sky photography with “fast” telescopes (astrographs)



- Since 2005: volunteer work with astronomy clubs (Outreach, technology, club management)
  - member of the „German Association of Amateur Astronomers“ (VdS) and of the Denver Astronomical Society (since 2012)
  - Chairman of the local astronomy club Johann-Kern-Sternwarte, Wertheim;
  - Head of the Special Interest Group „Astronomical Associations – Central Region“ of the VdS (since 2017)
  - Co-founder, vice-chairman and editor of the special interest group „Remote Observatories“ (since 2021)
  - Associate board member of the VdS (since 2023)
  - Vice-chairman of the VdS (since July 2026)

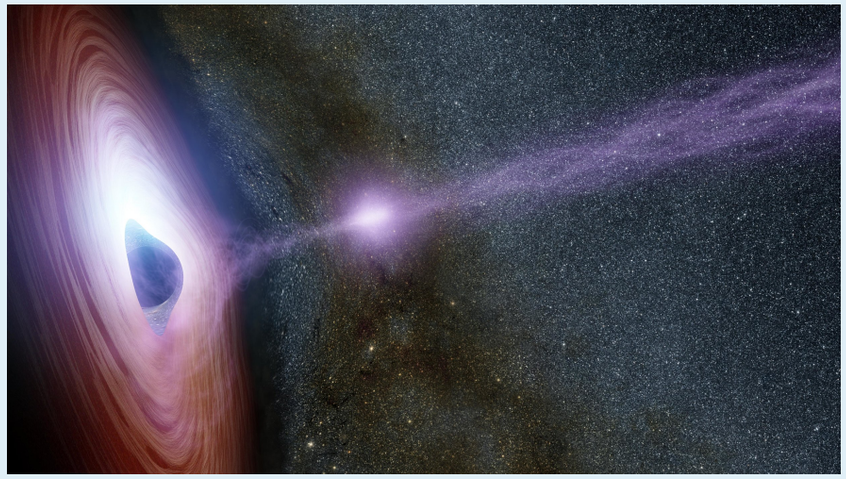
Deirdre HORAN, LLR/Ecole Polytechnique (IN2P3/CNRS)



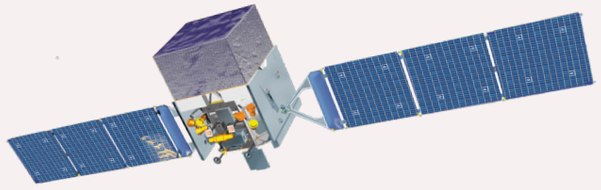
Past: PhD - Whipple Telescope (Arizona) - Search for TeV Blazars



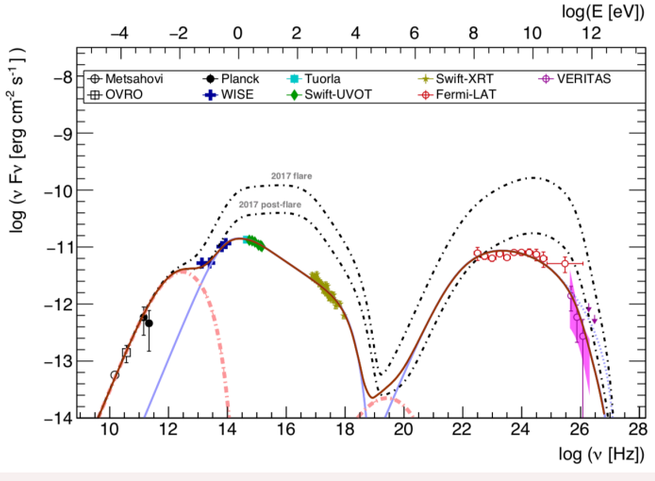


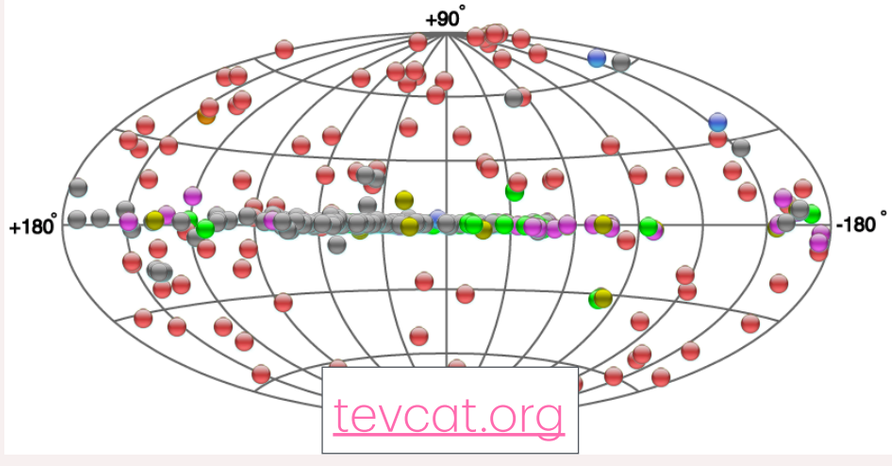


Present: GeV-TeV - *Fermi*-LAT / CTAO / VERITAS - Blazars - Multimessenger - TeVCat

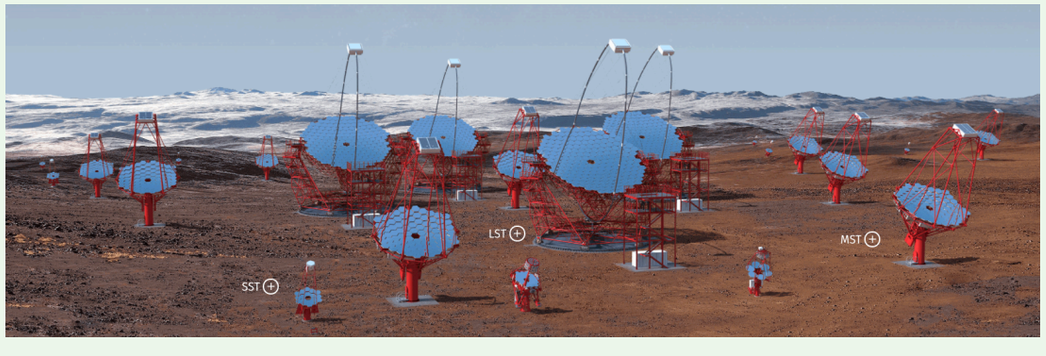


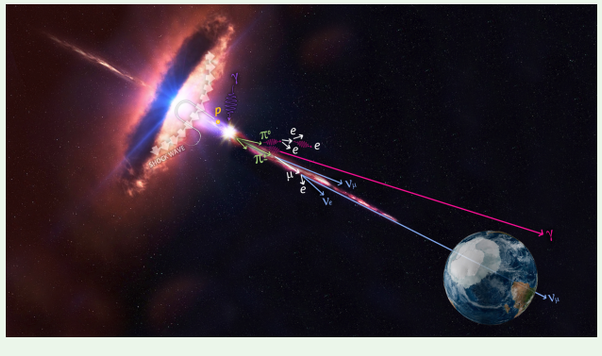




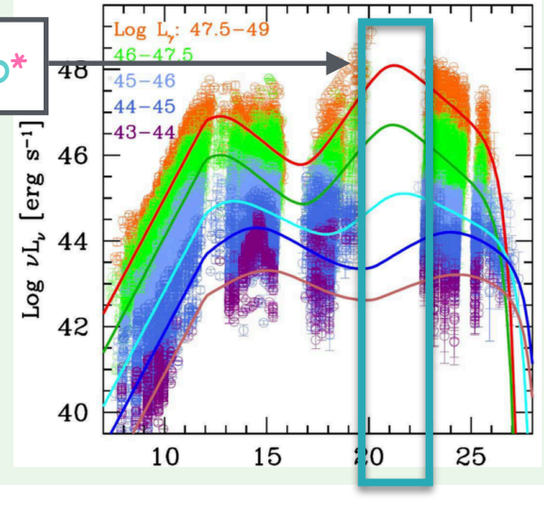


Future: CTAO - Neutrinos & blazars - MeV gap





The MeV Gap*



* using blazars to illustrate the gap since these are broadband emitters from radio all the way up to gamma rays

Anastasia Baluta

2nd year PhD student, Center for Astrophysics and Cosmology, University of Nova Gorica, Slovenia

BSc + MSc in Astronomy, Lomonosov Moscow State University

Master thesis on discovering and analysing anomalous objects in the ZTF survey within Fink broker.

PhD research project:

Multi-messenger studies of the origin of ultra-high energy (UHE, E > 10^{18} eV) cosmic rays using the upgraded Pierre Auger Observatory

Current test research task:

Differentiating between the preshower and non-preshower photons with Auger surface detector array



Ilja Jaroschewski

Post-doc at CEA Paris-Saclay, IRFU

H.E.S.S. Collaboration

- Responsible for VoSystem
- AGN flares & more transients observations with H.E.S.S.

CTAO

- Transient events
  - GRBs
  - GWs
  - AGN flares

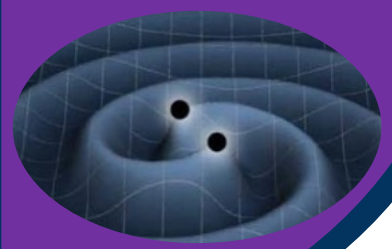
H.E.S.S.

GRB & GW task force leader with *Bernardo Cornejo*

CTAO

IVOA

SMBBH merger predictions



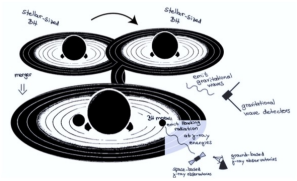
Astro-COLIBRI developer

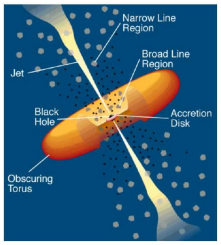
Fell free to get in touch with me if you have any questions

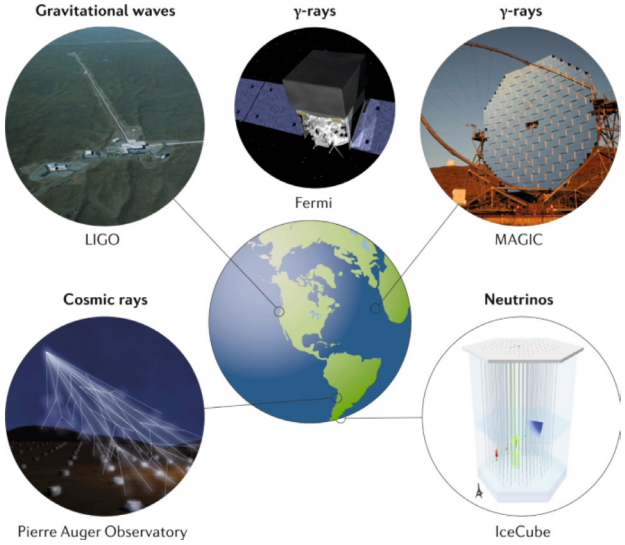
- Quasiperiodicities in MWL data
- Applying semi-analytical models on light curves
- Predicting future signals + GWs

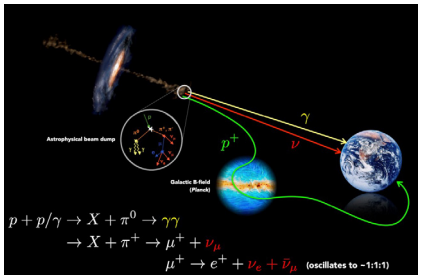
Ilja.jaroschewski@cea.fr

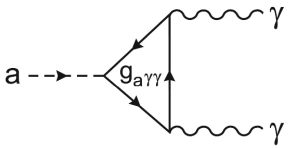




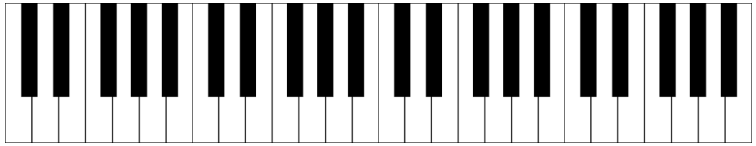












"Different messengers, one cosmic symphony."

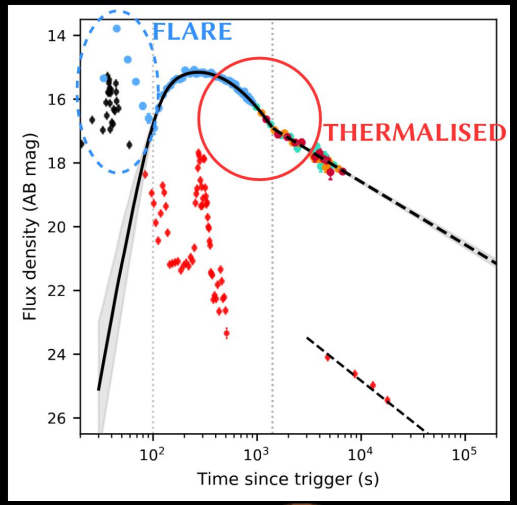
Atreya Acharyya

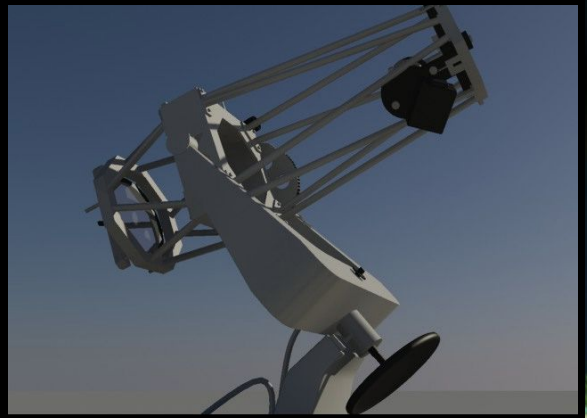
Research Fellow, IJCLab, Université Paris-Saclay

atreya.acharyya@ijclab.in2p3.fr

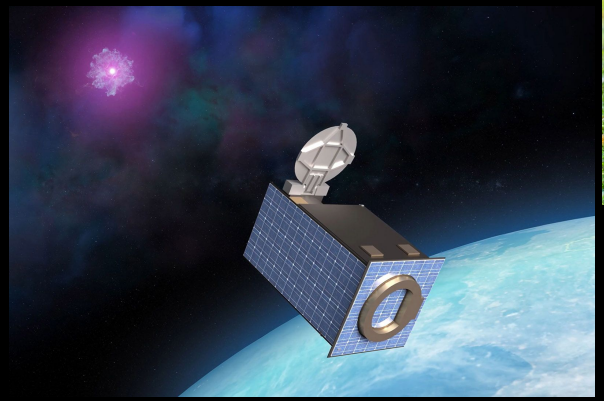
Co-funded by the European Union

Filip Novotný









CZECH AEROSPACE RESEARCH CENTRE • MUNI – QUVIK – QUICK ULTRA-VIOLET KILONOVA SURVEYOR

Barbara Patricelli

- Associate professor at the Physics Department of the University of Pisa, Italy
- Member of the following collaborations: Virgo, Einstein Telescope, Cherenkov Telescope Array Observatory (CTAO), Gravitational Wave INAF TeAm (GRAWITA) and Electromagnetic counterparts of gravitational wave sources at the Very Large Telescope (ENGRAVE)

- Research focus: multimessenger astronomy with gravitational waves and high-energy astrophysics (data analysis, simulations, theoretical interpretation)

- Roles and responsibilities within the collaborations:
  - Co-chair of the LIGO-Virgo-KAGRA (LVK) Multimessenger Transients Working group
  - Coordinator of the CTAO Transients Working group
  - Liaison between LVK and the Multi-wavelength Characterization and Counterparts subgroup of the Rubin Transients and Variable Stars Science collaboration
  - Member of the ENGRAVE Governing Council



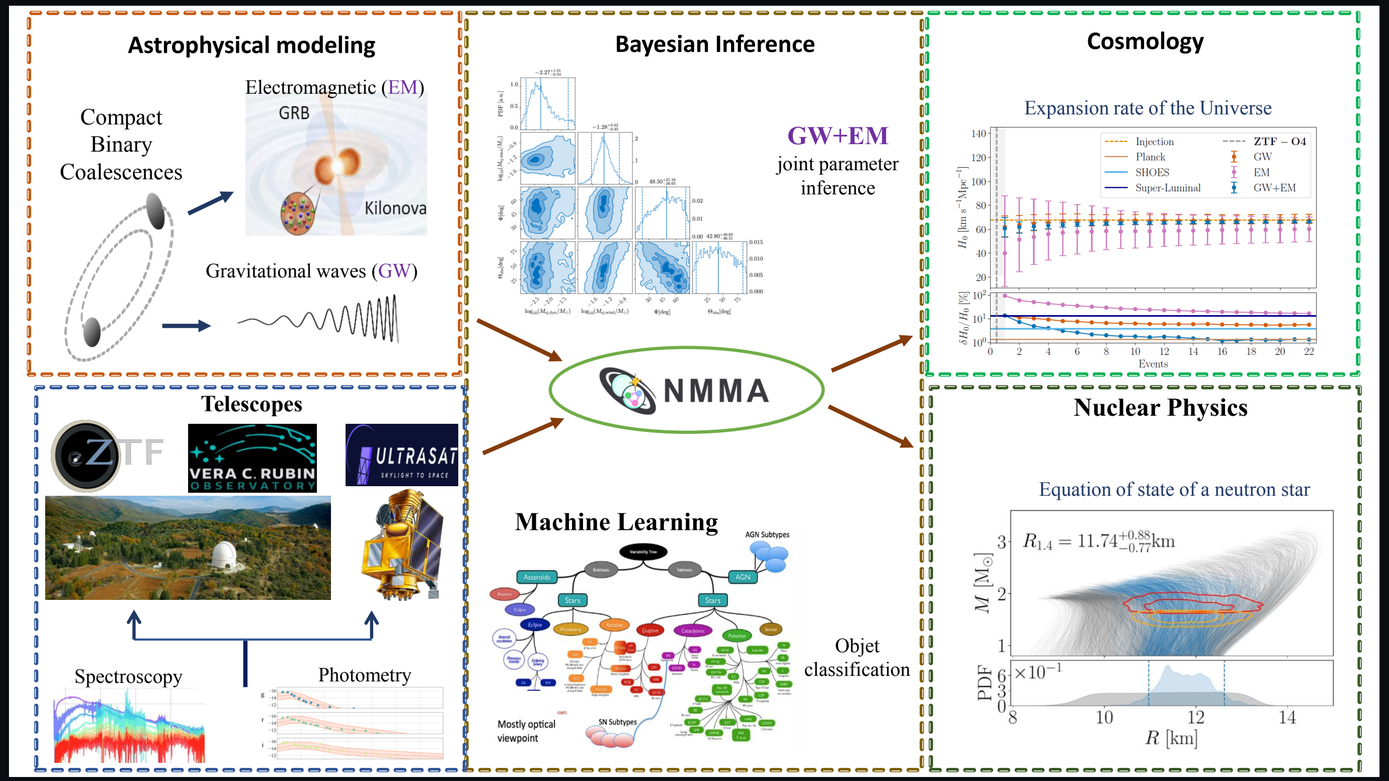
When I’m not working, I like irish dancing, reading, traveling and hiking

About Me & Areas of Expertise

R. Weizmann Kiendrébéogo - Postdoc, IRFU / CEA Paris-Saclay

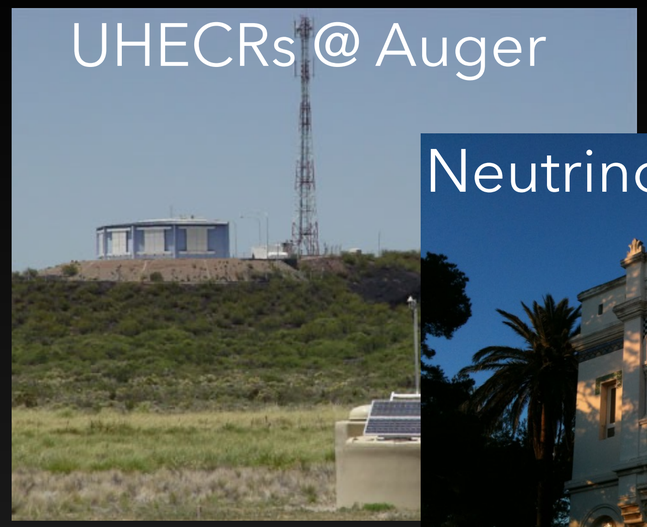
Astro-COLIBRI developer





Fabian Schussler

IRFU / CEA Paris-Saclay













Main interests:

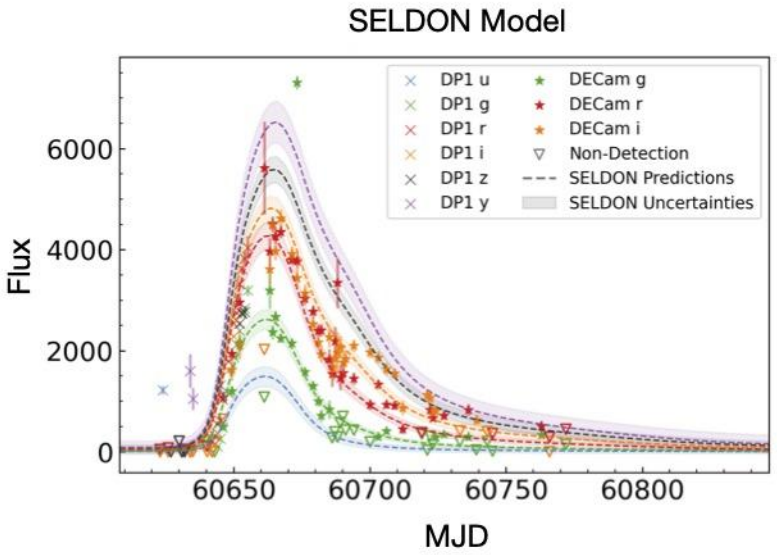
- Transient and multi-messenger phenomena
- Tools and platforms

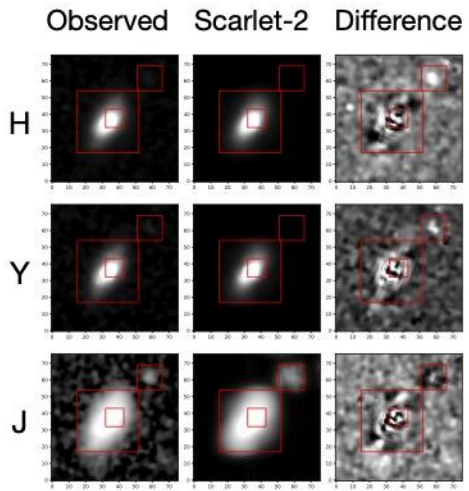
…

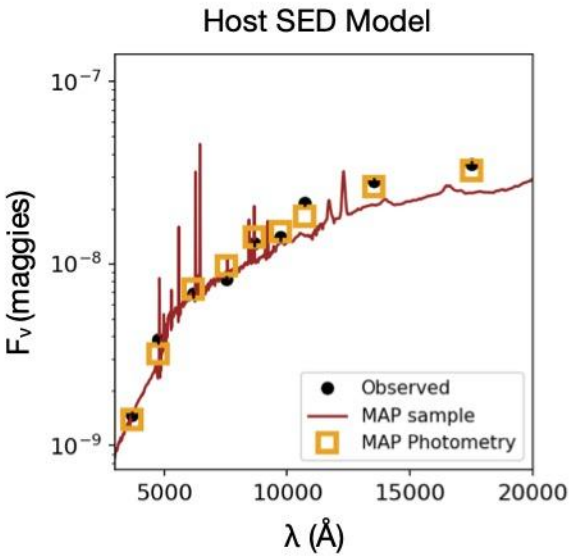


tilepy

Gautham Narayan







Scientific Interests: **Cosmology**, particularly understanding dark energy, **time-domain astrophysics**, **survey science**, **AI** to enable studying time-domain astrophysics and cosmology with surveys, **building tools and services** to combine multi-modal data from multiple astrophysical surveys, and making them available to the community

Projects (all of which I manage, distressingly):

UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

LSST DESC Dark Energy Science Collaboration

scimma.org

SkAI

Funded by the U.S. National Science Foundation and the Simons Foundation



Emily Hunt

Postdoc, University of Vienna

My normal day job...
Machine learning
Star clusters
Variable stars
Scientific software

Why I'm here
Founded a project using the AT Protocol for scicomm

It has exciting applications for real-time decentralized data streaming...

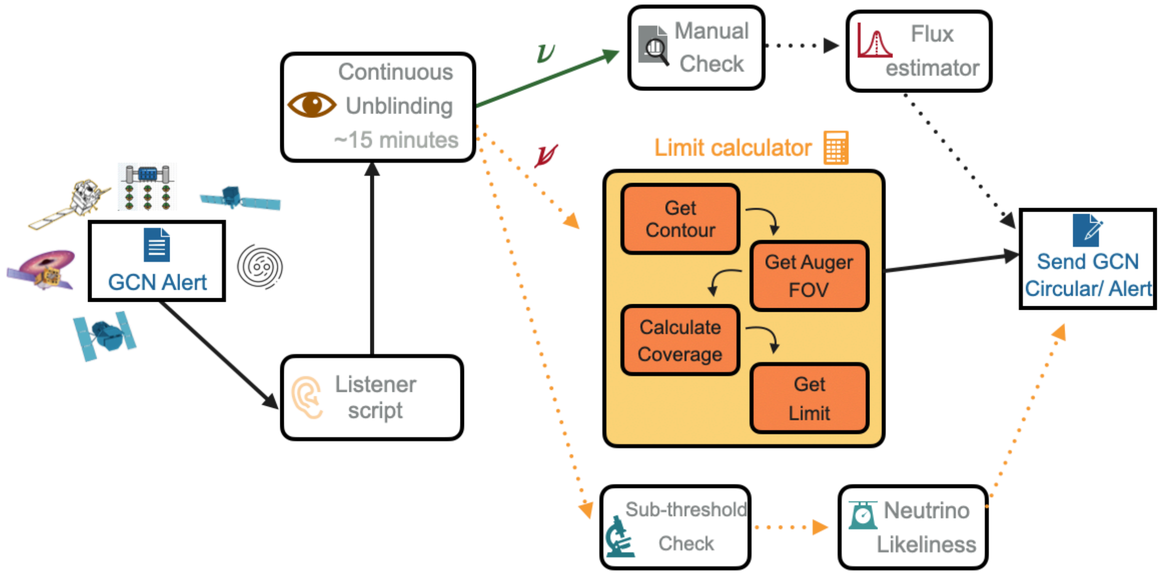
Unique skills
Web development
The AT Protocol
Science communication
Making computers go brrr

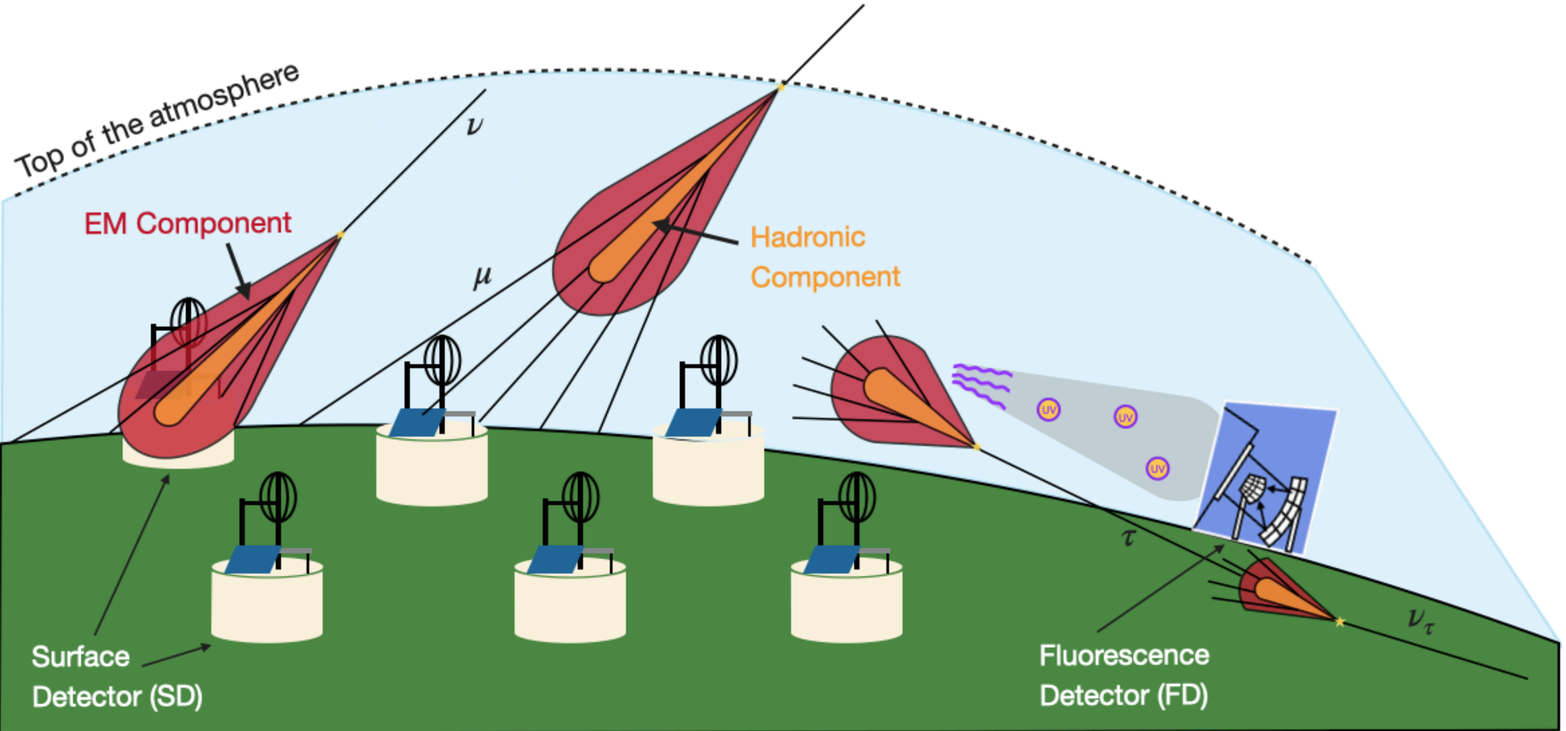
Random facts: cat lover; plays guitar; board game fan

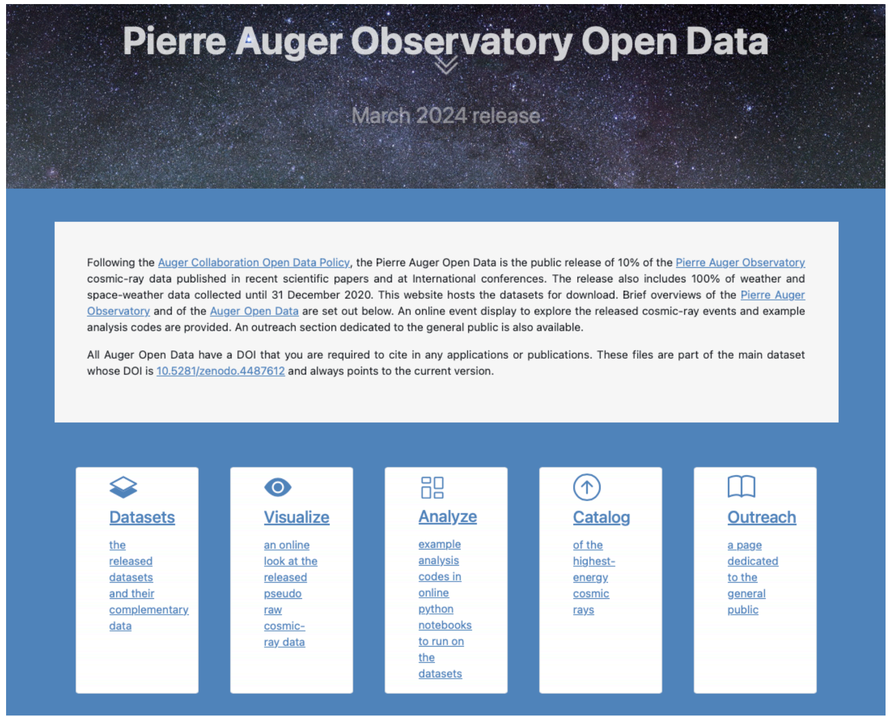
HUNTING FOR NEUTRINOS AT AUGER

(SRIJAN SEHGAL)

- Main Research: Searching for ultra-high-energy neutrinos
- Current focus: ACME in Auger
  - Managing Auger Open Data Archive and Releases
  - Real-time neutrino follow-up system







Antoine Ciric Software Developer of

Full-Stack Development

Working on frontend and backend solutions as

Docker

Building and optimizing the latest Dockerfile versions

Personal topic

Master IT, Video games, manga/anime, aeronautics, history, dev









Guangman Xiang

Post-doc of IHEP, Chinese Academy of Sciences · LHAASO Collaboration gmxiang@ihep.ac.cn

❖ What I work on

- Real-time TeV transient monitoring with LHAASO-WCDA:

  all-sky blind search ‖ targeted monitoring

- Follow-up of GCN / ATel alerts
- AGN variability analysis



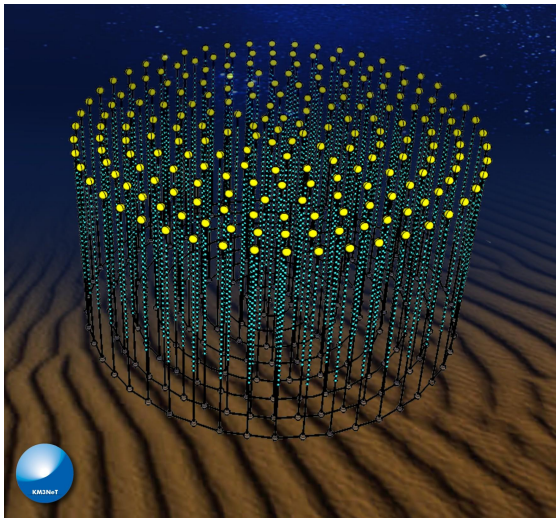
❖ Happy to discuss

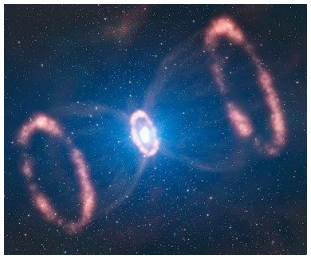
Multi-wavelength coordinated observations

Multi-messenger follow-up — neutrino & GRB counterparts at TeV band

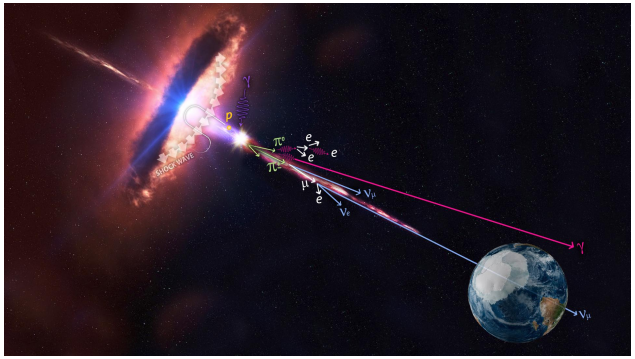
Massimiliano Lincetto

Aix-Marseille Univ. / CPPM









Past: CPPM, U. Bochum, U. Würzburg / DESY Zeuthen

Background: **KM3NeT, IceCube, SNEWS**

Current activities: **KM3NeT**, **SVOM**, **COLIBRÌ** (the telescope)

Most “recent” work: Blazar Counterparts of the Ultra-high-energy Event KM3-230213A but I also have been playing with public IceCube data.

Current focus: **KM3NeT realtime system / neutrino astronomy**



Patryk Liniewicz

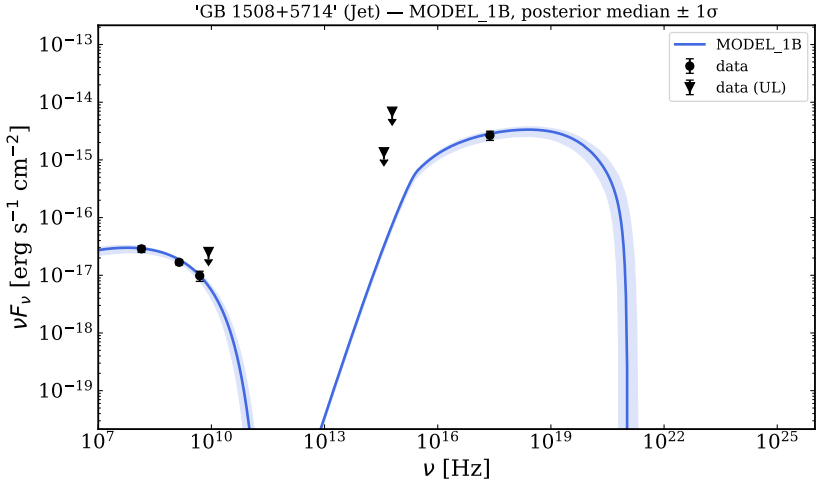
PhD researcher at Jagiellonian University, Kraków

Usually fueled by **yerba mate**



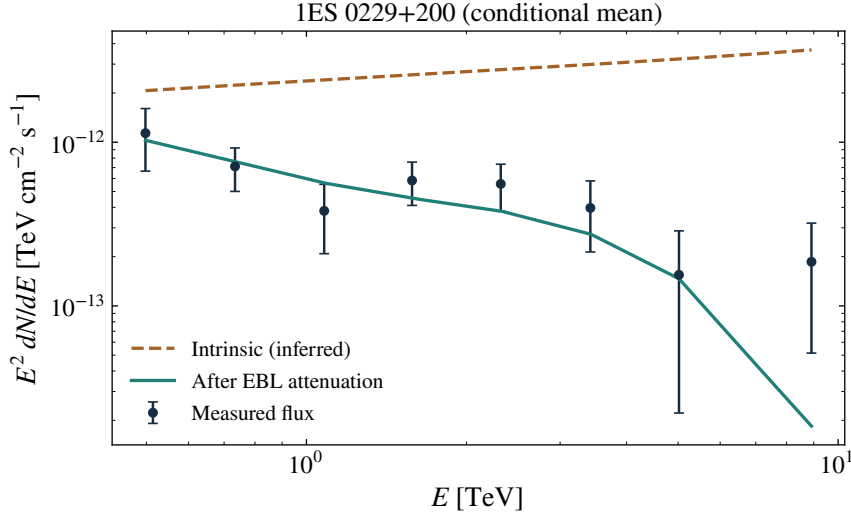
Extragalactic kpc jets

MHD-informed modeling of broadband emission: connecting jet structure to the observed spectrum.



EBL & cosmology

Gamma-ray attenuation and cosmological inference, with a focus on systematic uncertainties.



Bayesian inference

Parameter inference and model comparison connect both projects.

$$p(\theta \mid D, M) \;\propto\; p(D \mid \theta, M)\, p(\theta \mid M)$$

What I want to learn here

How to work with **neutrino data**

and utilize this messenger in my projects.

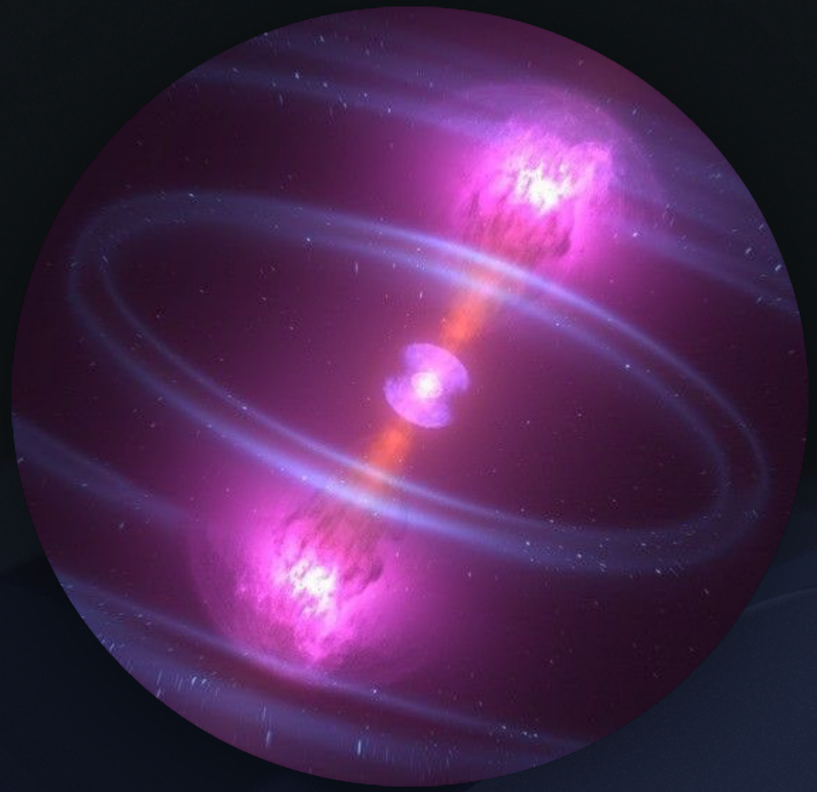
Sofia Bisero

Postdoc on *multi-messenger astroparticle physics with Astro-COLIBRI*

Irfu, CEA-Saclay



Astro-COLIBRI developer



Burst Advocate
& Affiliate Scientist

OSB Div. 4
MM Observations

Time Domain WG

GRB afterglow modeling task force

Paul Minodier

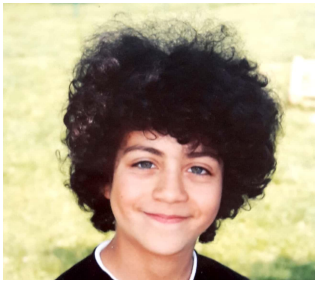
2nd year PhD student at Institut d'Astrophysique de Paris

Supervisor: Kumiko Kotera

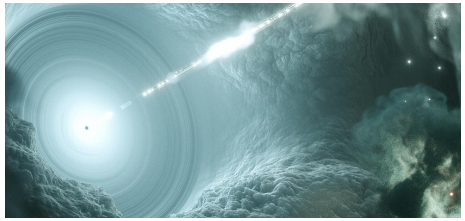
Main works:

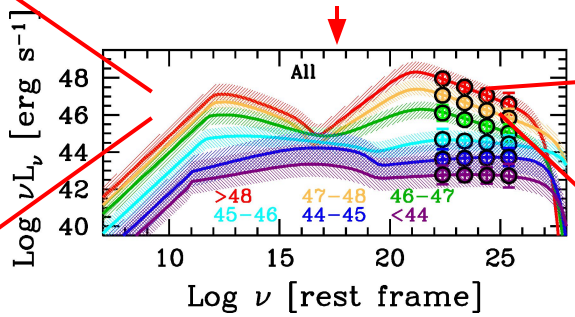
- HERON collaboration:
  - multi-messenger strategy, alert follow-up and detection prospects
  - interferometric reconstruction and resolution in radio-detection
- GRAND collaboration:
  - proton-gamma discrimination with a hybrid radio-scintillator array
  - CORSIKA/CoREAS simulations

Julian Hamo: 3rd y. PhD student @ **IJCLab**



Optical surveys:



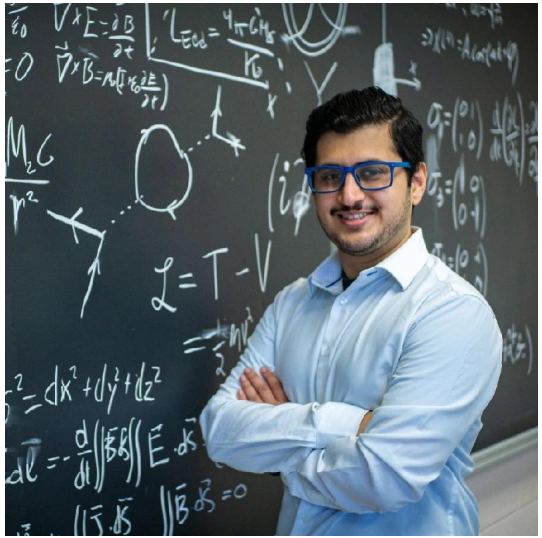


γ-ray observatories:

Fermi Gamma-ray Space Telescope

CTAO

FINK



Ketan R. Sand
McGill University
Montréal, Canada

Position: Scientific Software Developer / Postdoc
PI : Prof. Daryl Haggard

Project : CanDIAPL - Canadian Data Intensive Astrophysics PLatform

Works on: Integrating and crossmatching transient alert streams (GCN, TNS, Rubin……).

Research Interest: Radio Transients (FRBs), Compact Objects, Kilonovae

Workshop: Contributed Talk (13th Oct) + Sciathon

What I want out of the workshop:
A non-exhaustive list of all the MMA software tools/services out there.

Can Confirm: A Québécois loves France more than the French.

Email: ketan.sand@mcgill.ca
Github: https://github.com/ketansand

Kumar Pranshu

ARIES, Nainital · University of Calcutta | Time-domain astronomy

My research interests lie in developing techniques for the automated detection and classification of transient candidates in optical surveys and conducting follow-up studies of the detected sources.

4-m ILMT

Developing **PyLMT** pipeline for detecting and classifying transient candidates with **4-m International Liquid Mirror Telescope (ILMT)**.

Image subtraction

Developing robust image-subtraction techniques to identify transient and variable sources in survey images.

Machine learning based transient detection

Utilising CNN-based real/bogus and transient alert classification.

Transient science

Supernovae, variable stars, galactic novae, AGNs, and asteroids with follow-up observation studies.

Small-field transient surveys

Exploring automated transient detection and classification in small-field optical surveys having limited training dataset using transfer learning and other techniques.

Community Alerts

Developing and releasing community-ready transient alerts from ILMT observations for follow-up and time-domain studies.



Top view of the ILMT mirror

Lauren Rhodes

- Research fellow @ McGill (Canada)
- Radio telescopes -> jet physics
- BIG proponent of SMALL telescopes

ATCA





ATA



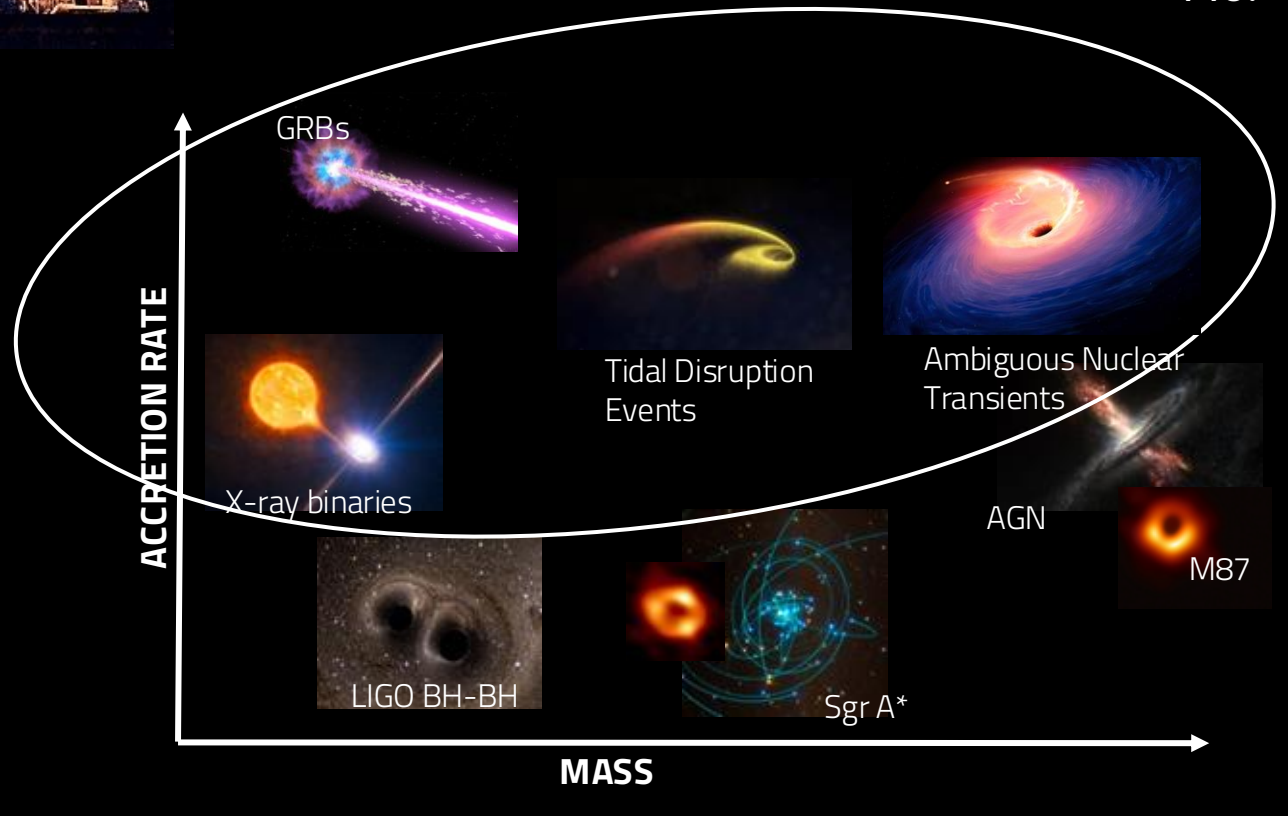
Me!

eMERLIN





AMI—LA





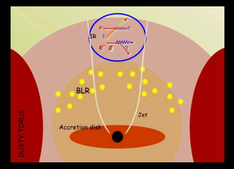


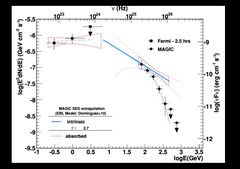
Antonio Stamerra

Scientific Highlights

2011

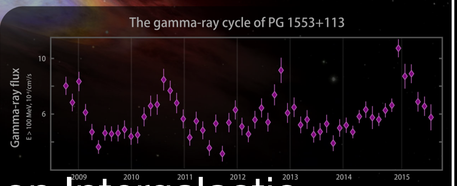
- MAGIC FSRQ PKS 1222+21: evidence γ-ray region outside BLR





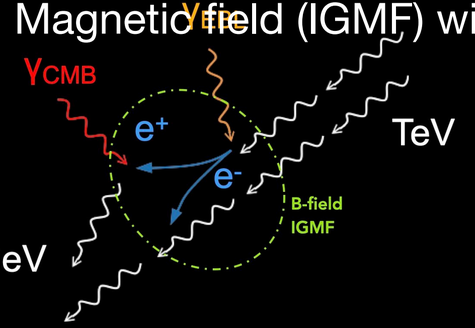
2015

- Evidence of quasi-periodicity from PG1553+113 Fermi-LAT, MAGIC monitor



2014-now

- Constraints on Intergalactic Magnetic field (IGMF) with γ-rays



2010-now

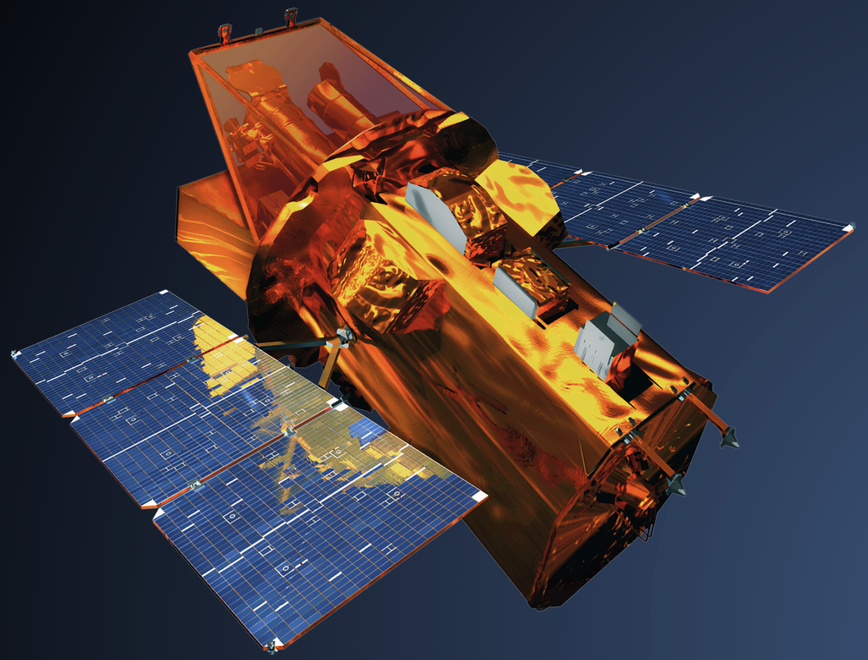
- Stubborn search of TeV GW counterparts (1st MAGIC proposal in 2010, until now)



MAGIC
Major Atmospheric
Gamma Imaging
Cerenkov Telescopes

CTAO | LST COLLABORATION

CTAO
Cherenkov Telescope Array Observatory

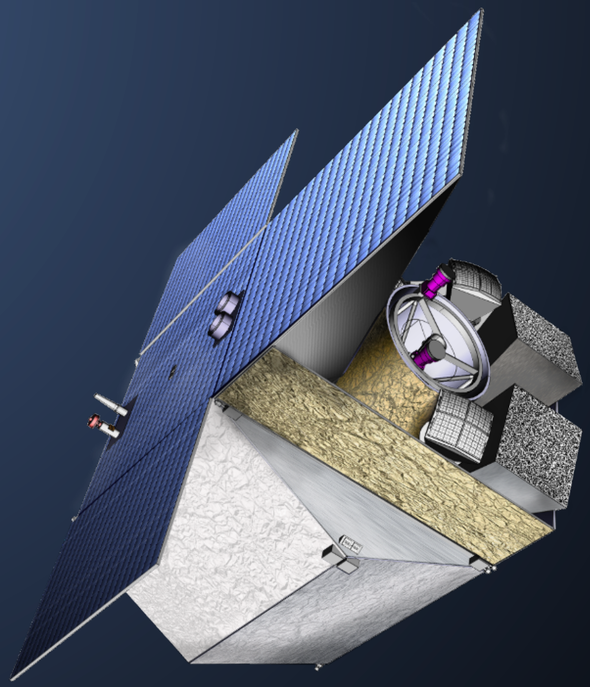




LIGO
VIRGO
KAGRA

G S
S I
GRAN SASSO
SCIENCE INSTITUTE
SCHOOL OF ADVANCED STUDIES
Scuola Universitaria Superiore

ET
ITALY
Einstein Telescope



My career in one sentence: exploring the Universe through high-energy neutrinos


CAPACITY Laboratory, Caserta (Italy), November 2021

2023: PhD in Sapienza University in Rome, Italy
Full Member of ANTARES and KM3NeT Collaborations

From the water …

- Phenomenology on Gamma-Ray Bursts (GRBs)
- Data analysis: search for coincidences between high-energy neutrinos in ANTARES and GRBs
- Software development (KM3NeT-ARCA Online Software Framework main developer and maintainer)

My last *Cacio e pepe* in Rome before moving to Germany


Rome, January 2024

Since February 2024:
Postoctoral Reaserch Fellow
Ruhr University Bochum (RUB), Germany
Full member of the IceCube Collaboration

…to the ice

- Fully involved in real-time activities
- Member of the Realtime Oversight Committee (ROC)
- Leading the optimization of the high-energy track alert system and maintaining the framework for processing track alerts
- Leading the development of the updated public catalog of alert tracks (to be released soon)
- Co-lead of the reconstruction working group

Since February 2026: joined KM3NeT as observer



Maybe me, one day ….
at the South Pole

Andrea Simongini

andrea.simongini@inaf.it

I'm a PhD Candidate (looking for a PostDoc!!)

I am a transient guy. I observe and study explosive transient phenomena like SNe and TDEs across the electromagnetic spectrum, from radio to very-high energy gamma-rays.

My main goal? Resolve Baade & Zwicky's question.

Astronomy Astrophysics Space Science PhD - Rome

INAF ISTITUTO NAZIONALE DI ASTROFISICA

CTAO

MAGIC Major Atmospheric Gamma Imaging Cerenkov Telescopes

RISE rebrightening in interacting supernova emission

Romain Maccary



Postdoc at **UNIFE** (Università degli studì di Ferrara) under the supervision of Prof. Cristiano Guidorzi.

* Study **the temporal properties** of the gamma-ray burst prompt emission.

* Investigate **prompt-based indicators of compact object merger origin** in long gamma-ray bursts.

<> Minimum variability timescale (Maccary+25)

<> Pulse evolution (Maccary+26a,b)



Research Background:

- UV Spectral Analysis of Active Galactic Nuclei
- Time Domain Analysis of X-ray Binaries
- Disentangling planetary signals from RV data of stars
- Wavelet Analysis of AGN data

Veda Samhita

Affiliation : Dept. of ECE, Vasavi College of Engineering, Hyderabad, Telangana, India
Current position: Undergrad Student

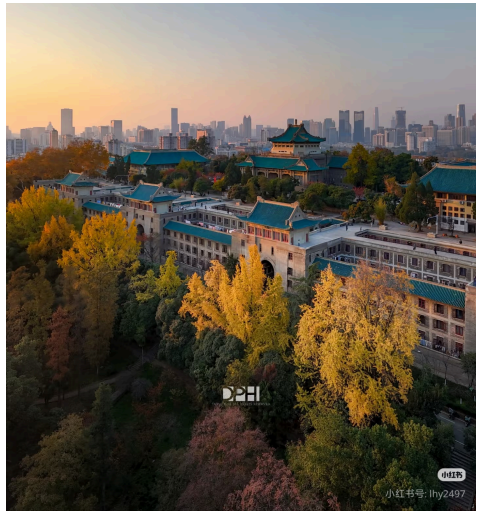
Beyond Astrophysics: Poetry, Art, Bullet Journaling, Carnatic Music, Bharatnatyam Dance

Talk to me about: Anything astrophysics related, my dogs, my hobbies

Yifan Tian

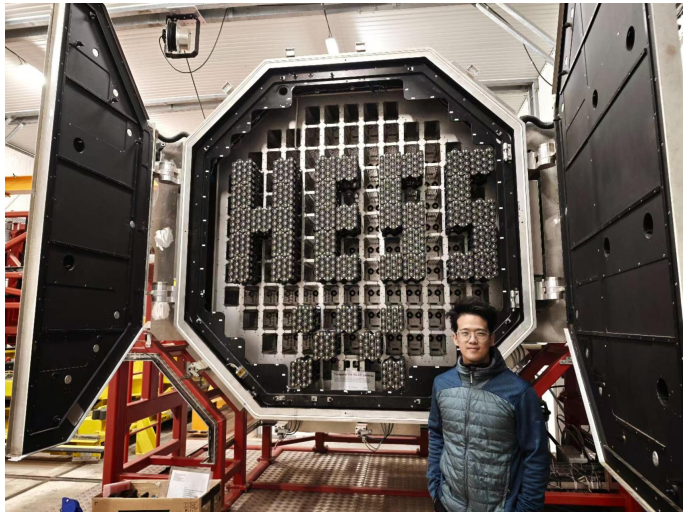
PhD student, Gamma group, DESY Zeuthen

EDUCATION	**B.Sc.** Wuhan University · **M.Sc.** Technische Universität München
PHD PROGRAMME	**HEIBRiDS** · DESY I Humboldt-Universität zu Berlin I Hasso Plattner Institute
RESEARCH	Optimizing VHE **Transient Follow-up** with Machine Learning (CTAO, H.E.S.S.)
HOBBIES	Hiking, skiing, photography



Wuhan University, China


DESY Zeuthen

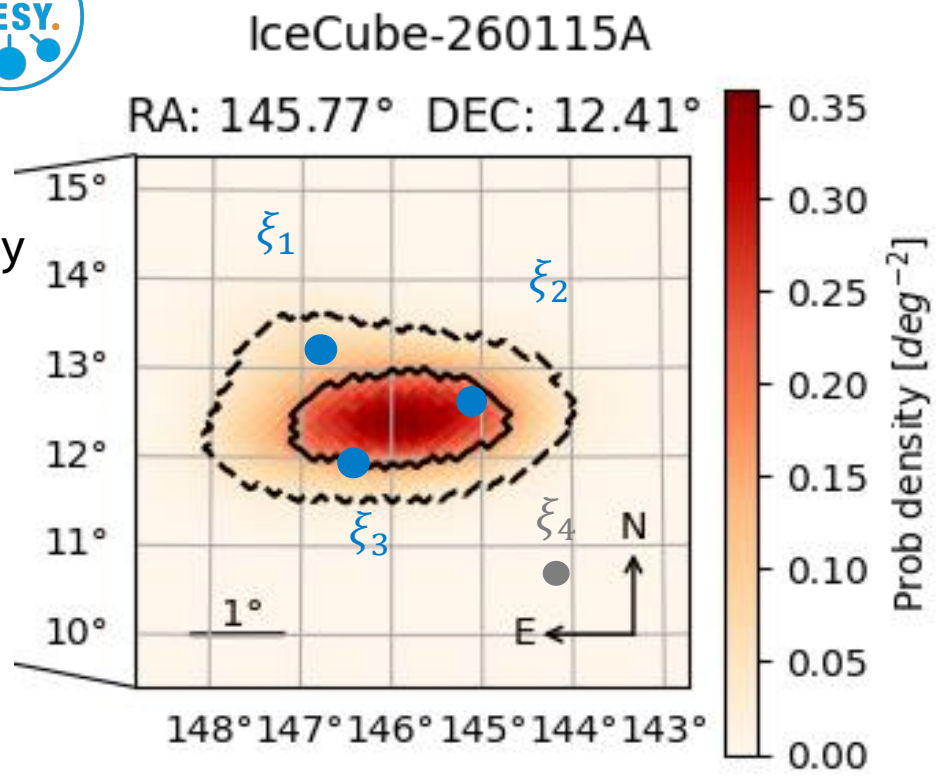

H.E.S.S. night shift, Namibia, July 2026

Cristobal Zilleruelo Cañas



From Santiago, Chile!
1st year PhD Student at DESY Zeuthen, Germany
cristobal.zilleruelo.canas@desy.de

Supervisors:
Marek Kowalski
Jakob Nordin



I search for **astrophysical transients** (SN, TDE, KN) as possible counterparts to **high-energy neutrinos**

I use **optical data** from the Vera C. Rubin Observatory (VRO) and the Zwicky Transient Facility (ZTF)

I'm part of the Realtime group in IceCube, and neutrino group in the ZTF Multi-messenger Astronomy group

Which optical transient ξ_j is the most likely counterpart of the neutrino alert?

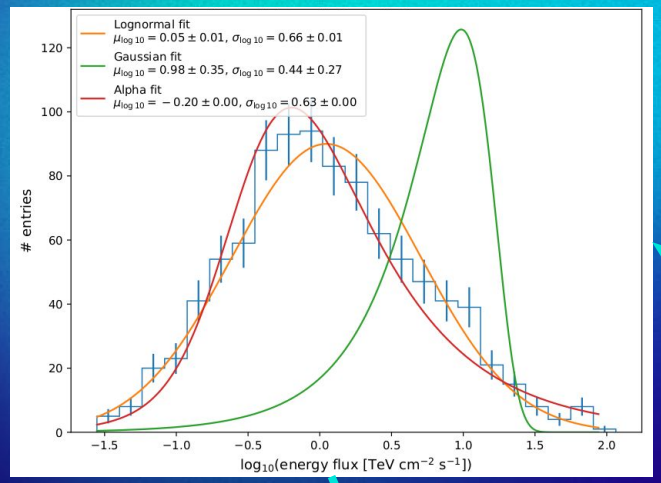
CTAO
Cherenkov Telescope Array Observatory

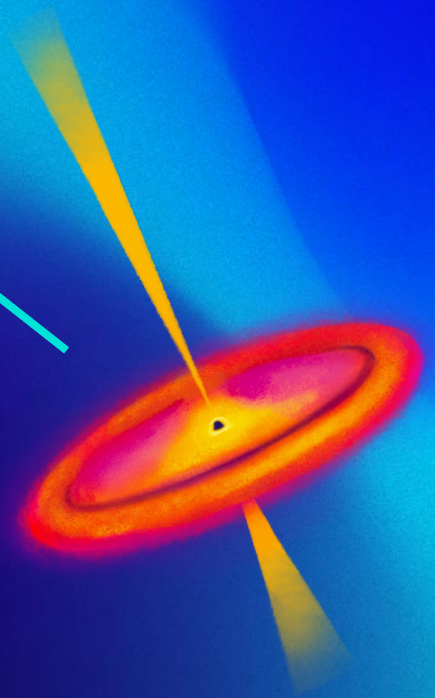
Anastasiia Mikhno 3rd year PhD

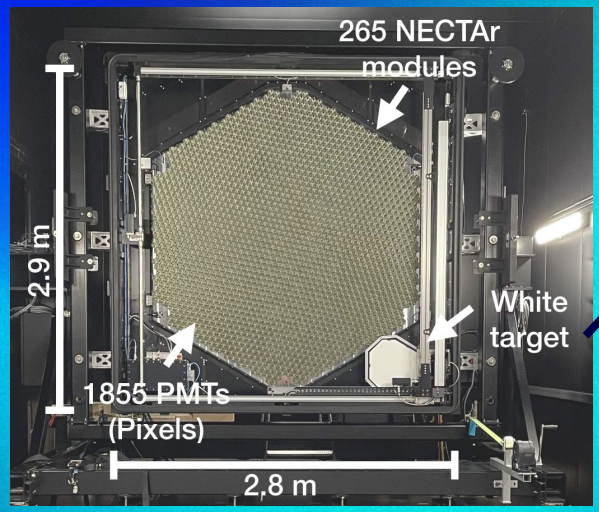
IJCLab Irène Joliot-Curie Laboratoire de Physique des 2 Infinis

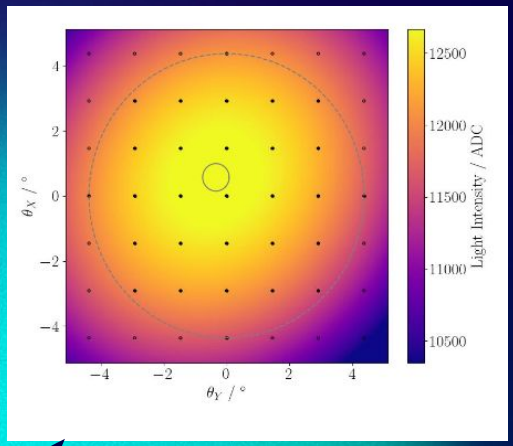
LPNHE PARIS

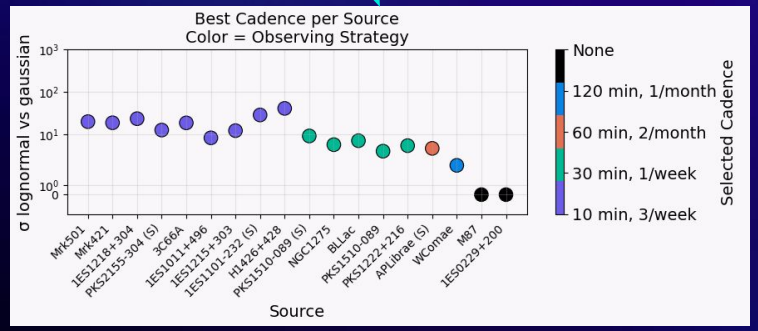
AGNs and NectarCAM













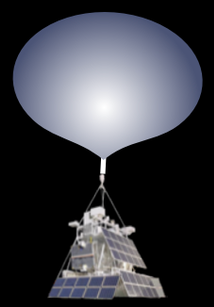
Claire Guépin

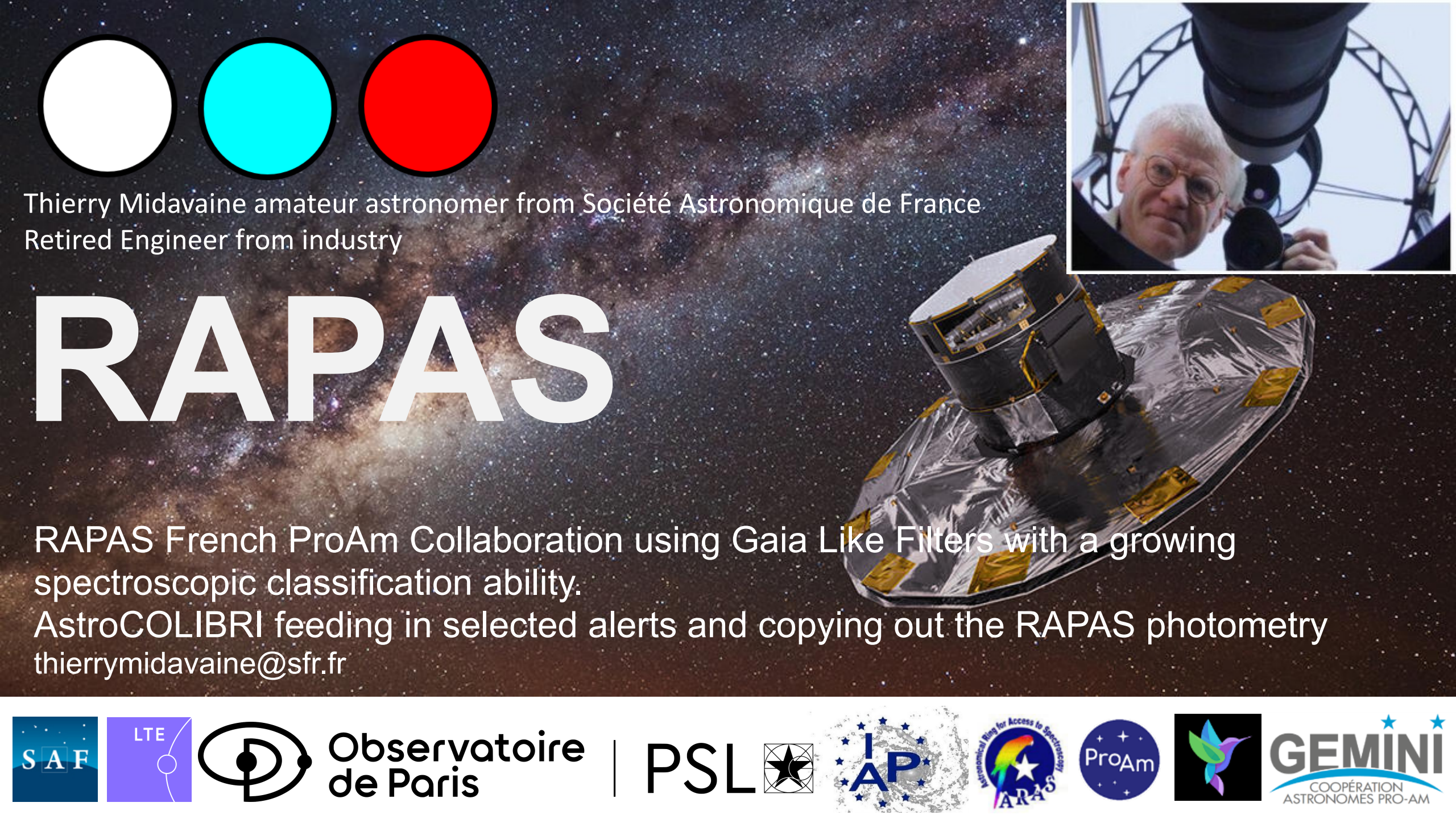
CRCN LUPM (Montpellier) since 2023

- High-energy astroparticles: photons, cosmic rays, neutrinos
  - Sources? Physical mecanisms for their emissions?
  - Transition from galactic to extragalactic cosmic rays?

- Multi-messenger modeling and phenomenology of energetic sources (compact sources, transient sources)
  - Gamma-ray bursts prompt emission, pulsar magnetospheres

- Detection of VHE neutrinos: EUSO-SPB2, PBR, GRAND, HERON





Thierry Midavaine amateur astronomer from Société Astronomique de France
Retired Engineer from industry

RAPAS

RAPAS French ProAm Collaboration using Gaia Like Filters with a growing spectroscopic classification ability.
AstroCOLIBRI feeding in selected alerts and copying out the RAPAS photometry

thierrymidavaine@sfr.fr