



Gravitational Wave Science Interest Group (GW SIG)

**Chiara Mingarelli (Yale University)
Alessandra Corsi (Texas Tech University)**

243rd American Astronomical Society Meeting, New Orleans, LA, January 7th 2024

GW SIG co-chairs (also members of PhysPAG EC)

My research focuses on multi-messenger time-domain astronomy, with emphasis on relativistic radio transients and GW physics. I am a member of the LIGO Scientific Collaboration, an associate member of the LISA consortium, and a member of the Cosmic Explorer management team.



Corsi



Mingarelli

I am a GW astrophysicist, looking to understand how supermassive BHs in the centers of massive galaxies merge. I do this by predicting their nanohertz GW signatures, which will soon be detected by pulsar timing array experiments. With pulsar timing data, I look for both individual supermassive black holes in binary systems, and for the gravitational-wave background which should be generated by their cosmic merger history.

Previous GW SIG Chairs

Name	Institution	SIG/SAG	Term
Jillian Bellovary	Queensborough Comm. Coll.	GW SIG / XR SIG	2019–2022
Sean McWilliams	West Virginia University	GW SIG	2019–2022
John Conklin	Univ. of Florida	GW SIG	2015–2020
Nicolas Yunes	Univ. of Illinois	GW SIG	2017–2020
Kelly Holley-Bockelmann	Vanderbilt Univ.	GW SIG	2016–2019
Neil Cornish	Montana State Univ.	GW SIG	2014–2016
Guido Mueller	Univ. of Florida	GW SIG	2011–2014

Gravitational Wave Science Interest Group

<https://pcos.gsfc.nasa.gov/sigs/gwsig.php>

- **Track and analyze evolving science goals and requirements** for NASA GW missions.
- **Support mission studies and concept development** for space-based GW observatories, including when cost savings are sought, or new classes of sources are under consideration.
- **Aid efforts to analyze technology development and prioritization plans** as science goals and mission concepts evolve within the PhysPAG.
- **Advocate for the brand new field of GW astronomy**, build a vibrant community, and promote this new field to the public.



The GW SIG is open to all members of the community!

If you are interested in contributing to the work of the GW SIG, please subscribe:

- **SUBSCRIBE** :) Send an email to GWSAG-join@lists.nasa.gov with Subject="join"
- **UNSUBSCRIBE** :(Send an email to GWSAG-leave@lists.nasa.gov with Subject="leave"
- **CONTACT THE LIST OWNER:** Send email to GWSAG-owner@lists.nasa.gov
- **OTHER INQUIRIES:** e-mail co-Chairs chiara.mingarelli@yale.edu & alessandra.corsi@ttu.edu

NOTE: To maintain uninterrupted communications, the GWSIG mailing list remains under the GWSAG name.

Please encourage potentially interested colleagues and students to sign up!

Join us for more gravitational waves!

Monday: [Fred Kavli Plenary Lecture: NANOGrav: The Dawn of Gravitational-wave Astronomy at Light-year Wavelengths, Stephen Taylor \(Vanderbilt University\)](#)

Tuesday, January 9, 2024 | 2:00 PM CT - 3:30 PM CT

Session Title

[NASA's Gravitational Wave Science Interest Group session](#)

Session Type

Splinters

Room

219

Agenda

2:00 pm Welcome and overview from Chiara Mingarelli, GW SIG co-chair

2:10 pm Neil Cornish “Links between LIGO and LISA science”

2:35 pm Magda Siwek, “Signatures of Circumbinary Disk Physics in Massive Black Hole Binaries”

3:00 pm Joe Simon, “Astrophysics with the NANOGrav 15 year data”

Yale

