

# The Universal Structure of Black Hole Winds



## What is the science question?

Black holes of all sizes that are actively accreting material have winds. How are these winds launched?

## What were your findings?

We compared model X-ray wind spectra with the Chandra data of the galactic black hole GRO J1655-40.

We found that the winds are launched through the action of magnetic fields that permeate the accretion disks around the black holes.

## What was the impact?

The models used to fit the data for the smaller black hole in this work are the same as those used in other studies to account for winds in black holes 100 million times larger.

*Hence, there appears to be a universal magnetic wind structure that applies to black hole of any mass.*

## Why does it matter to non-scientists?

We are now closer to understanding the radiation emitting from any black hole in the Universe, no matter its size.