Combining information from multiple gravitational wave signals
KATERINA CHATZIOANNOU, CARL-JOHAN HASTER, AARON ZIMMERMAN, Univ of Toronto — Gravitational waves can be used to characterize the properties of their sources, with many subtle effects -such as deviation from general relativity- more effectively studied by combining information from many such signals. In this talk I will describe the assumptions implicit in various methods for combining information from multiple sources and discuss their implications. I will show that the correlations between the parameters of interest need to be taken into account, as they affect how rapidly information is accumulated.