

Stochastic background—Monte Carlo simulations

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- LAL routines for simulating SB signals convolved with instrument response functions (IFOs/bars, frequency domain, ~ 8 minutes)
- Add simulated SB signals to real noise before any processing is done (make frame files ahead of time, or add in datacondAPI??)
- Vary SB signal strength to construct confidence belts for subsequent upper limit determination (e.g., Feldman-Cousins)
- Two real numbers (CC statistic value and theoretical variance) written to the database for each ~ 90 s stretch of data
- Analysis to be done at UWM
- Two 8-minute stretches of simulated SB signals were injected via hardware during E7 (test of complete data analysis pipeline)

