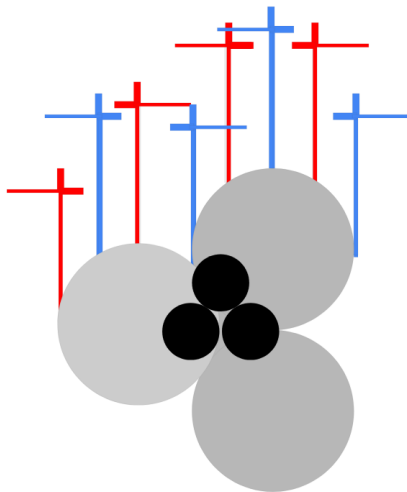




RáfagaTM





Bao's MRLRSV Model

- Estimate spot VIX from evolution of futures modulo strike price evaluation

$$\text{Call}(\tau, K) = e^{(-\int_0^\tau r_s ds)} * [F_\tau * \Pi_1 - K * \Pi_2]$$



Model Metrics

- Ingests data from CBOE, Bloomberg and Yahoo! Finance
- Calculates per-strike value in two seconds on 8GB RAM
- RMSE in initial testing is 3.543 for 30 day call on VIX



Computational Convergence

- Math does not always translate to code easily
- The limit may not yield improvement



Solution

- Machine learning on hyper-parameters to tune model