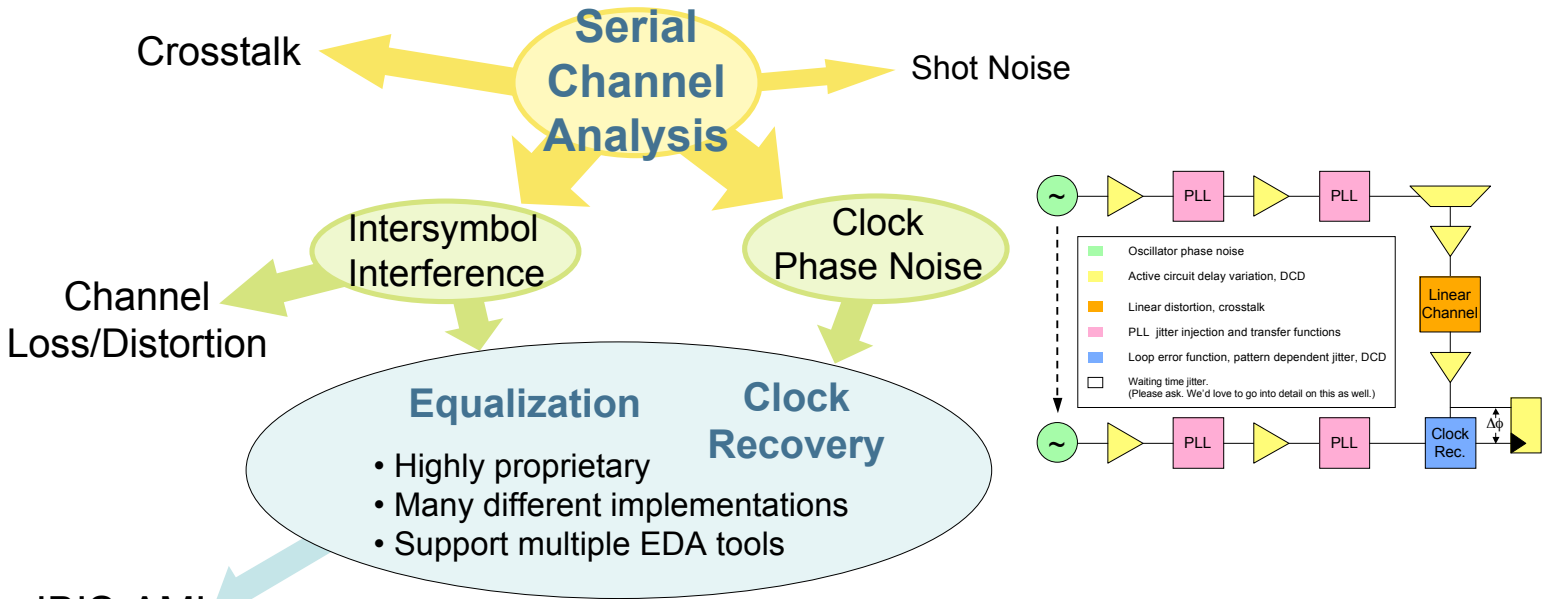


# Using IBIS-AMI Models to Study Clock Recovery Loop Performance

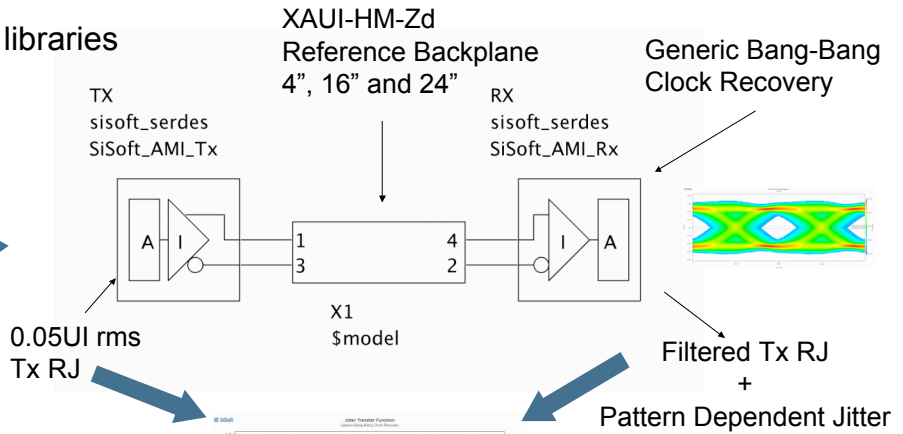
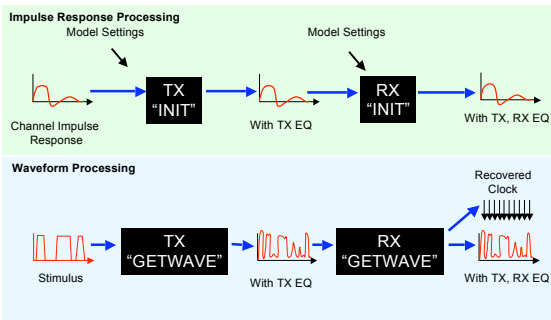
Barry Katz – SiSoft Mike Steinberger – SiSoft

**GOAL: Evaluate CDR loop performance at design time under realistic channel conditions**

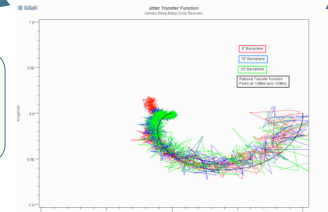


## IBIS-AMI

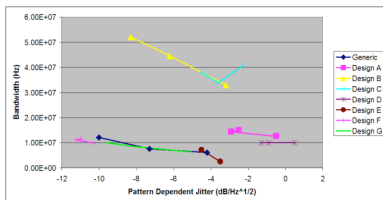
Distribute algorithmic models as compiled libraries



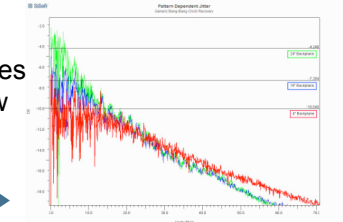
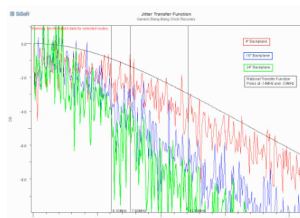
**Polar plot shape remains constant**



**CDR loop performance varies with IP supplier.**



CDR loop bandwidth decreases as pattern dependent jitter low frequency spectral density increases



**Total pattern dependent jitter remains approximately constant**