Cheating Table

Options and parameter settings for **ReconCheater** are contained in a **Cheating.properties** file. The currently supported properties and their values for the SiD Aug. 05 detector are:

Property	Default setting	Description
FullTruth	false	Use Monte Carlo particles only.
Truth	false	Use true energy for reconstructed particles.
ECalParameterization	false	Use a parameterization of ECal energy for found clusters.
ReconPhotons	true	Use reconstructed ECal energy for found clusters.
HCalParameterization	false	Use a parameterization of HCal energy for found clusters.
ReconNeutralHadrons	true	Use reconstructed ECal energy for found clusters.
Decays	true	Allow long-lived particles to decay.
DecayProducts	true	Use charged particles from decays.
DecayNeutrals	true	Use neutral particles from decays.
DecayDistance	100.	Distance defining long-lived particles, in mm.
NuclearInteractions	true	Allow particles to interact.
NuclearInteractionProducts	true	Use charged particles from interactions.
NuclearInteractionNeutrals	true	Use neutral particles from interactions.
Radiation	false	Allow particles to radiate.
ECalResolution	0.18	Parameterized ECal resolution.
ECalSampling	0.012	Simulated ECal sampling fraction.
HCalResolution	0.60	Parameterized HCal resolution.
HCalSampling	0.	Simulated HCal sampling fraction.
HCalDigital	11.7	Simulated digital HCal response, in hits/GeV.
pTrackMin	0.100	Minimum reconstructed track momentum, in GeV.
EClusterMin	0.100	Minimum reconstructed cluster energy, in GeV.
ECalEnergyMin	0.100	Minimum reconstructed ECal cluster energy, in GeV.
HCalEnergyMin	0.250	Minimum reconstructed HCal cluster energy, in GeV.
NDigitalMin	4	Minimum number of digital HCal hits.
PerfectEnergyFlow	true	Use perfect energy flow.
Distance2XCluster	50.	Minimum distance to 2X cluster, in mm.
Distance4XCluster	100.	Minimum distance to 4X cluster, in mm.