S	(a) Intuition-Guided	(b) TDG-Based Prediction
Static Techniques	Good Parallel? Yes No Trace? Yes SIMD DySER CCores BERET	Perf/En Prediction  IR TDG PST  Scheduling
sa	Execution Trace	Execution Trace
niqu	Inner Iters Inner Iters	Inner Iters
Tech	Outer Iter. Outer Iter. PST	Outer Iter. Perf/En PST
Dynamic Techniques	Accelerator Sample Scheduling	Perf. Counter Sample  Predict. Scheduling
~	(c) Mixed-Granularity Sampling	(d) Online Machine Learning