

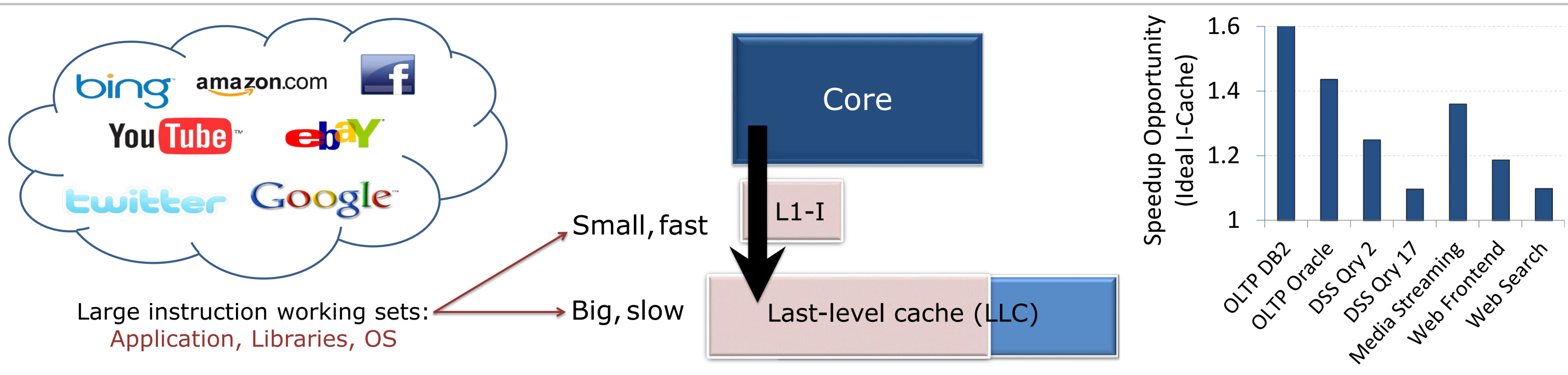
Shared History Instruction Fetch for Lean-Core Server Processors

Cansu Kaynak
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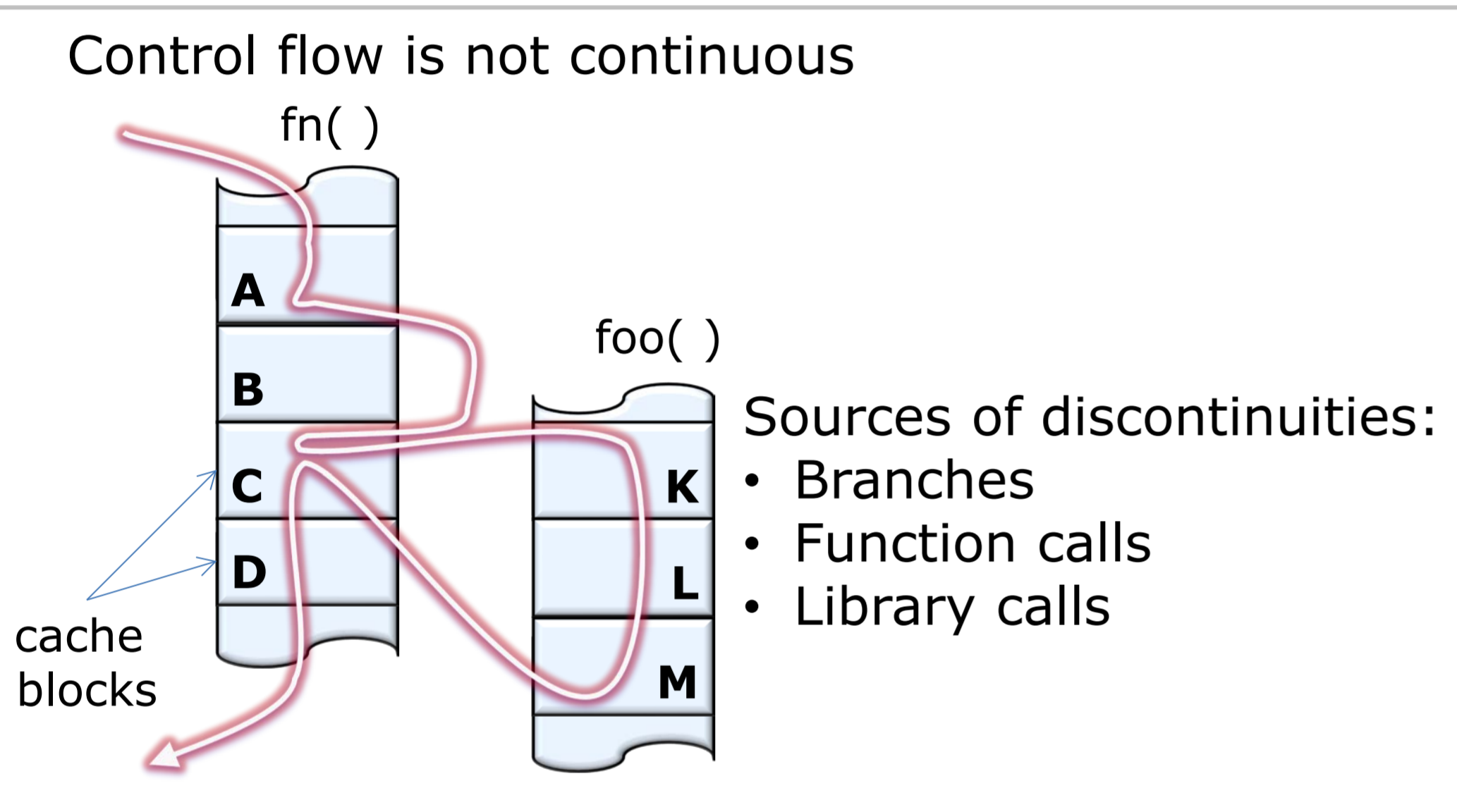
Boris Grot
University of Edinburgh

Babak Falsafi
EPFL

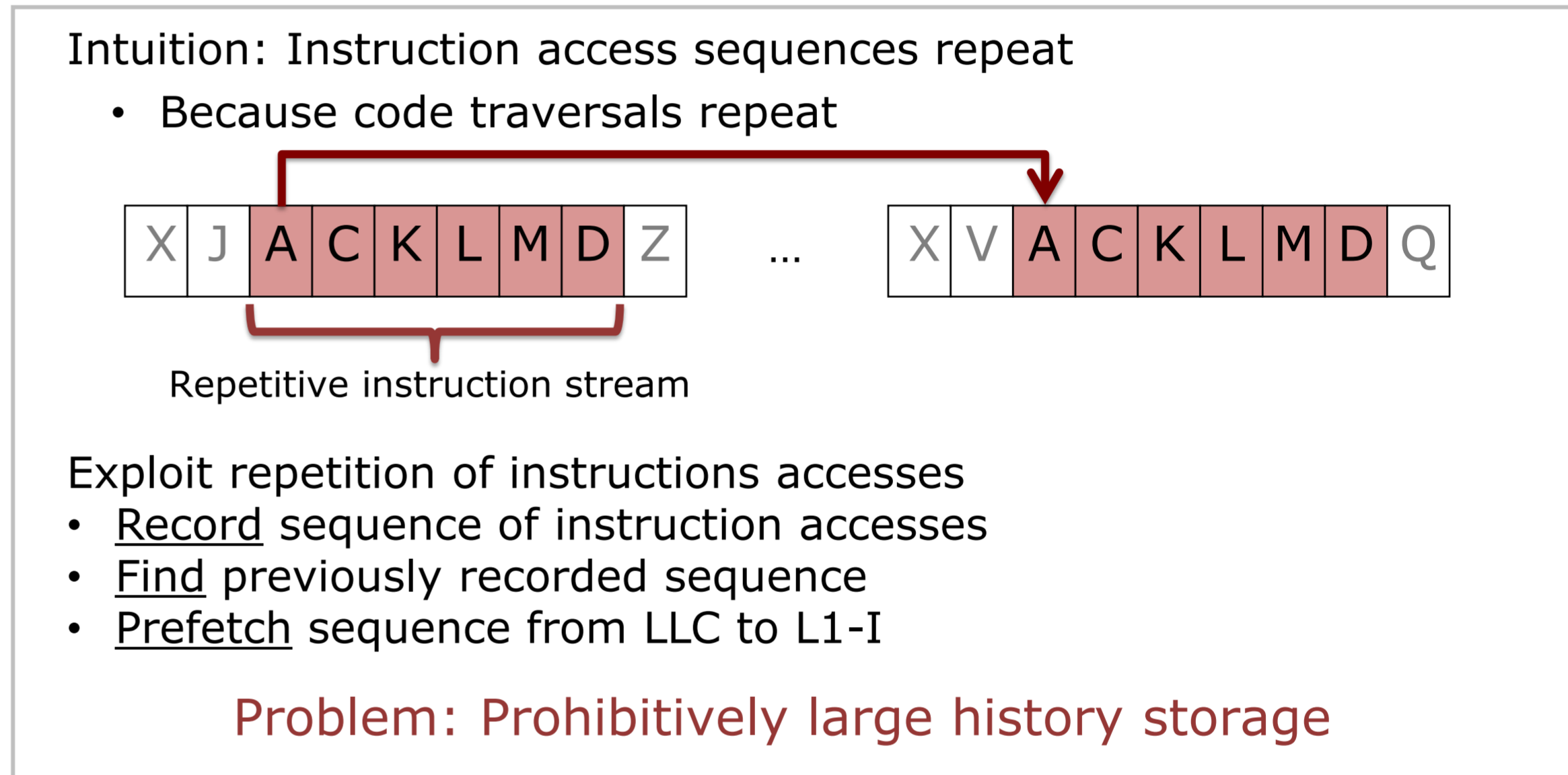
Instruction Fetch Bottleneck in Server Workloads



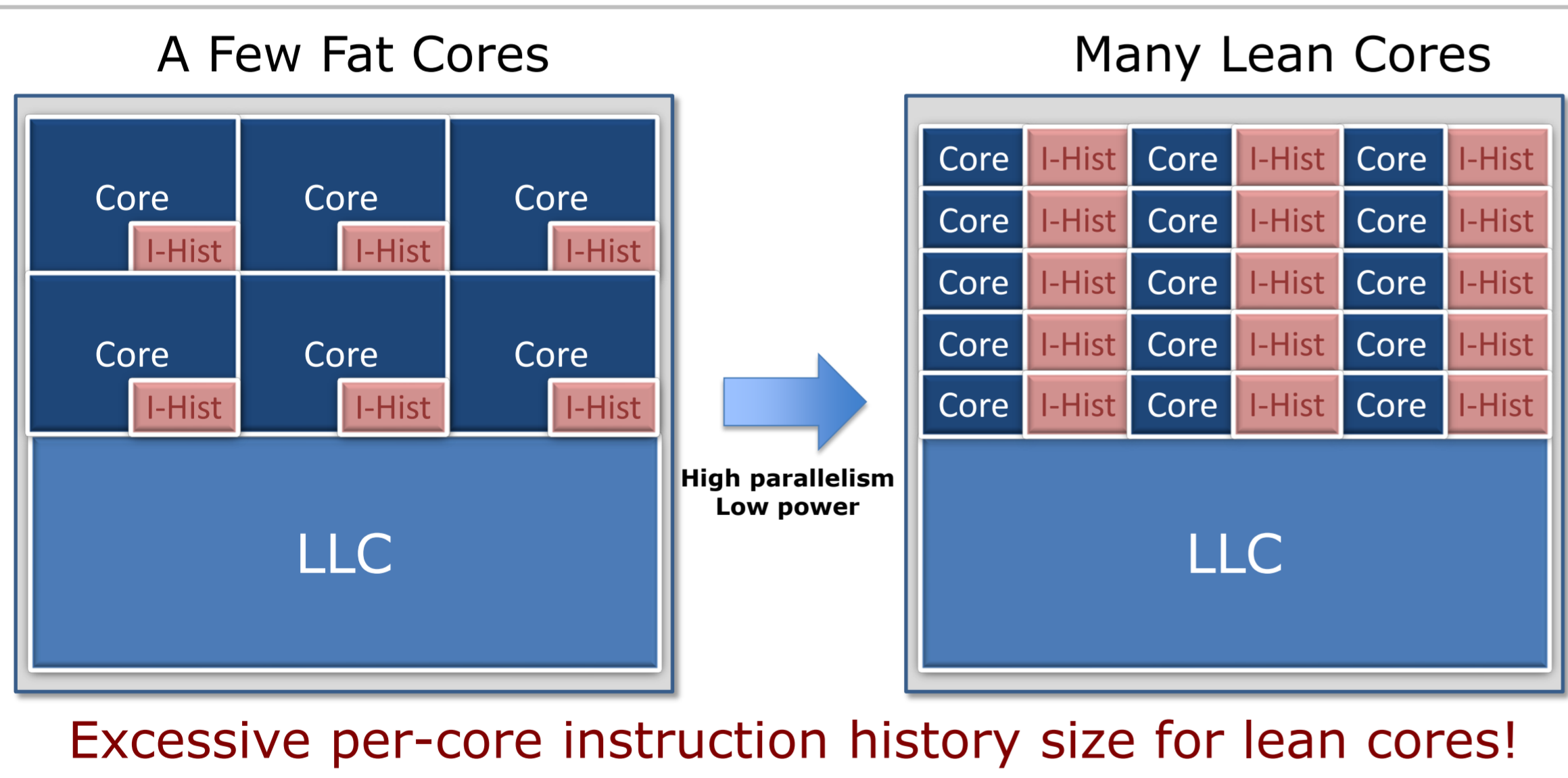
Instruction Fetch Discontinuities



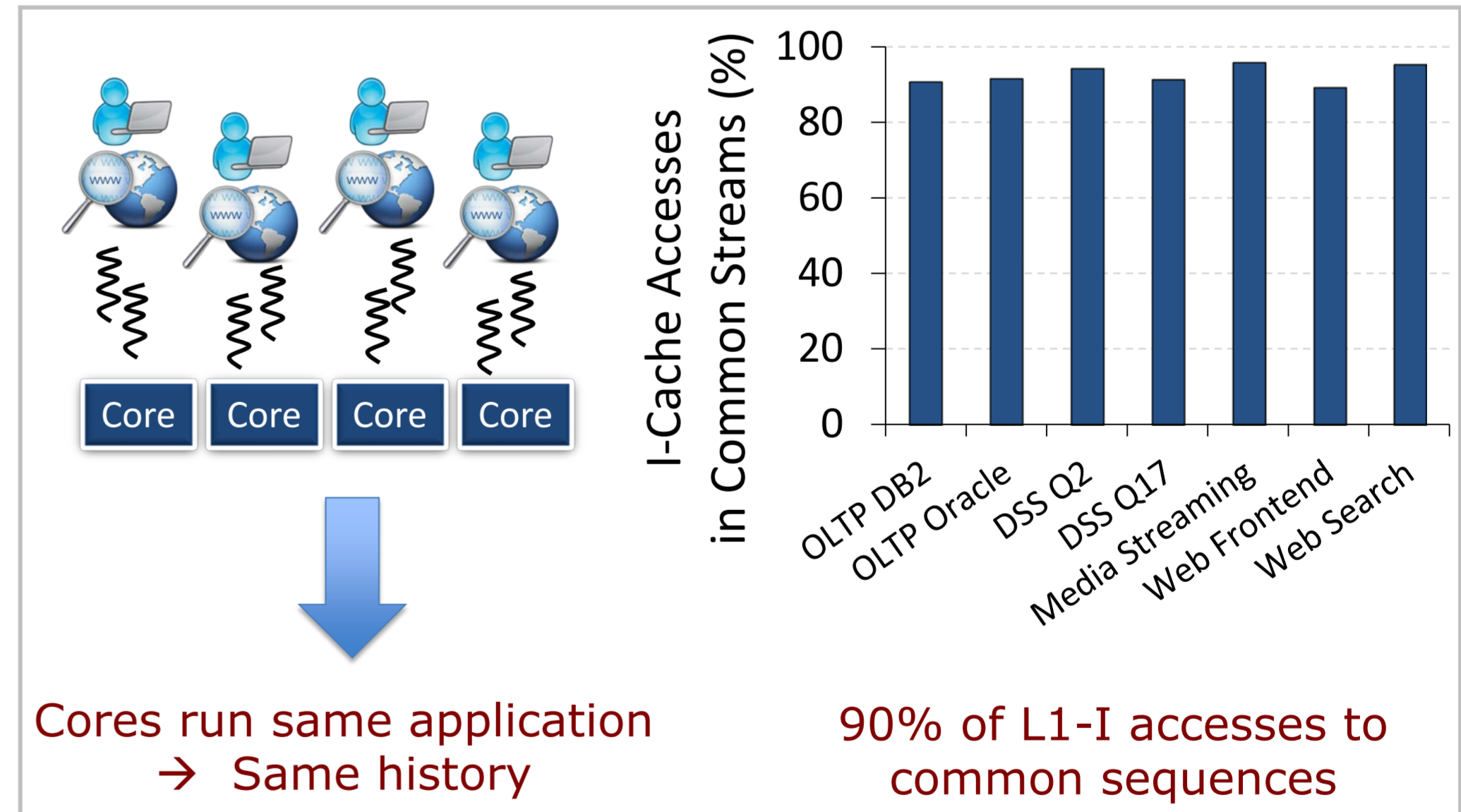
Eliminating Fetch Discontinuities



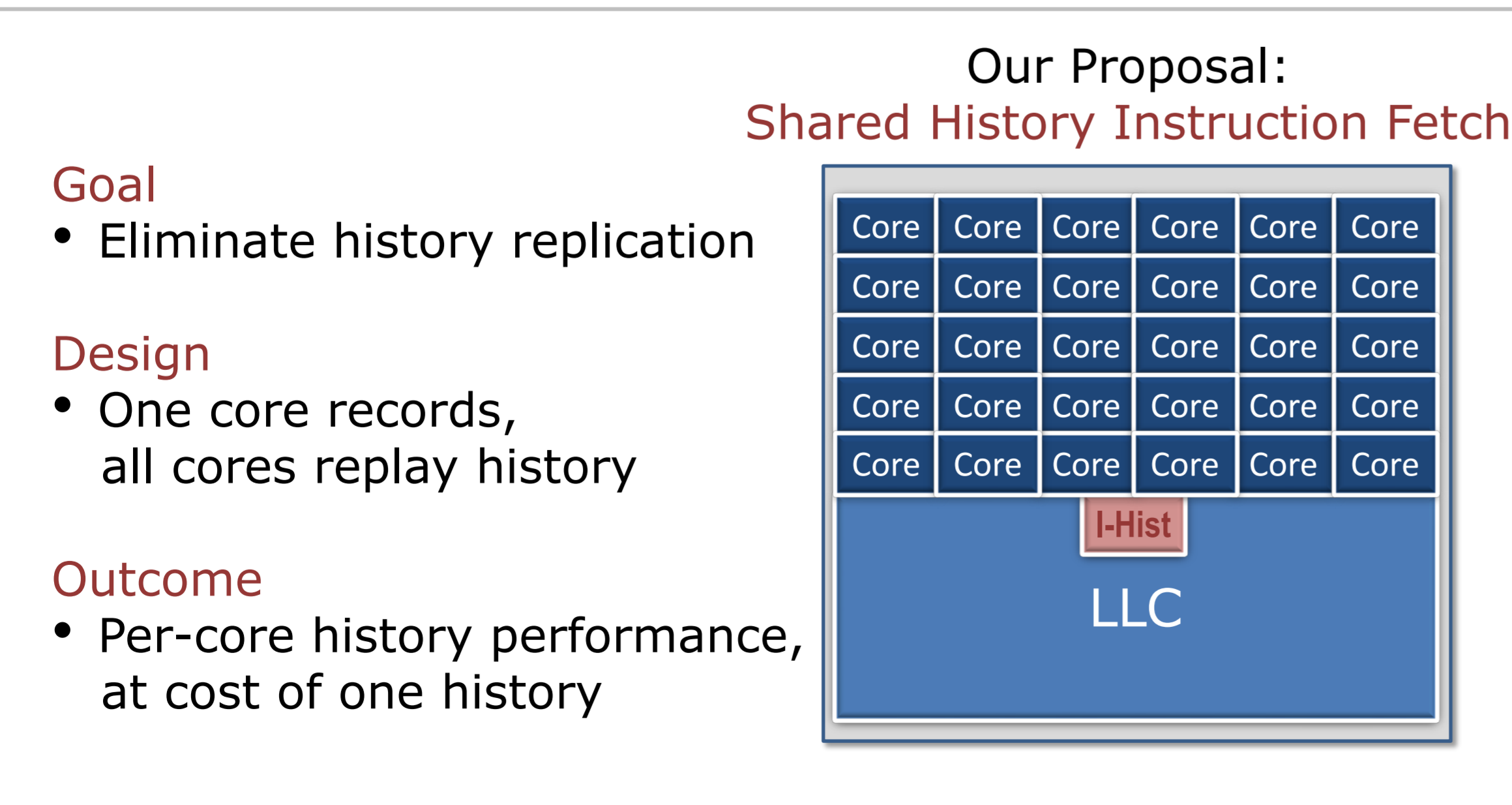
Integrating Instruction History into Modern Servers



Server Cores Execute Same Code



Sharing History Among Server Cores



Result Highlights

