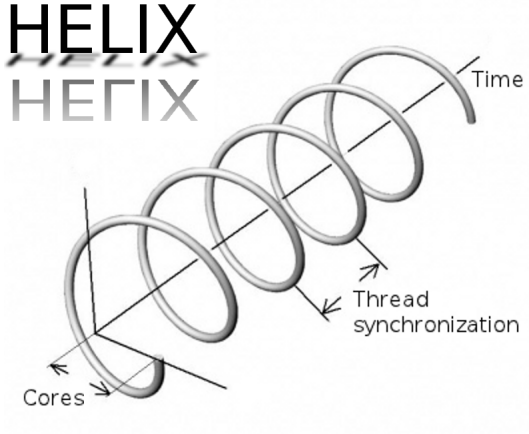
HELIX-RC
An Architecture-Compiler Co-Design for Automatic Parallelization of Irregular Programs

Simone Campanoni, Kevin Brownell, Svilen Kanev
Timothy M. Jones, Gu-Yeon Wei, David Brooks

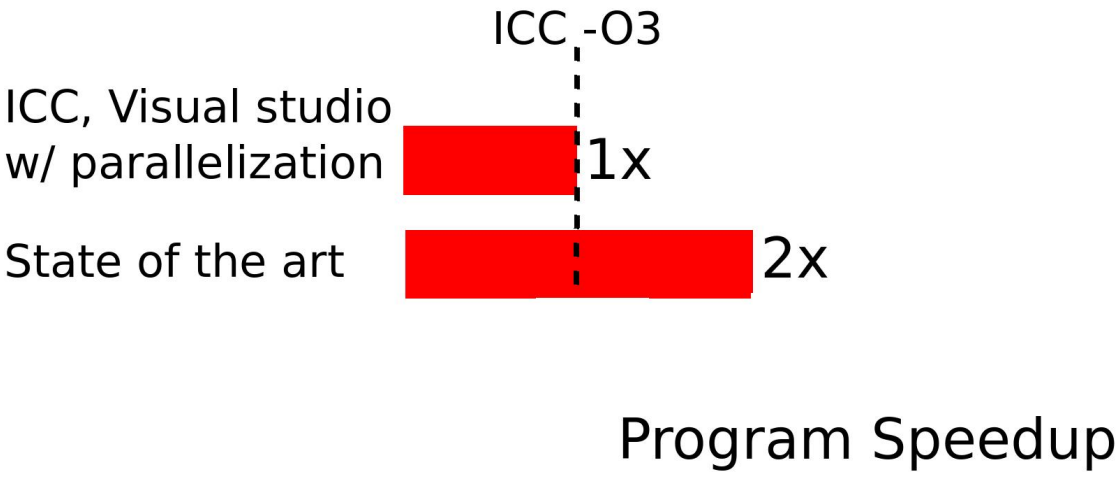
HARVARD
School of Engineering and Applied Sciences



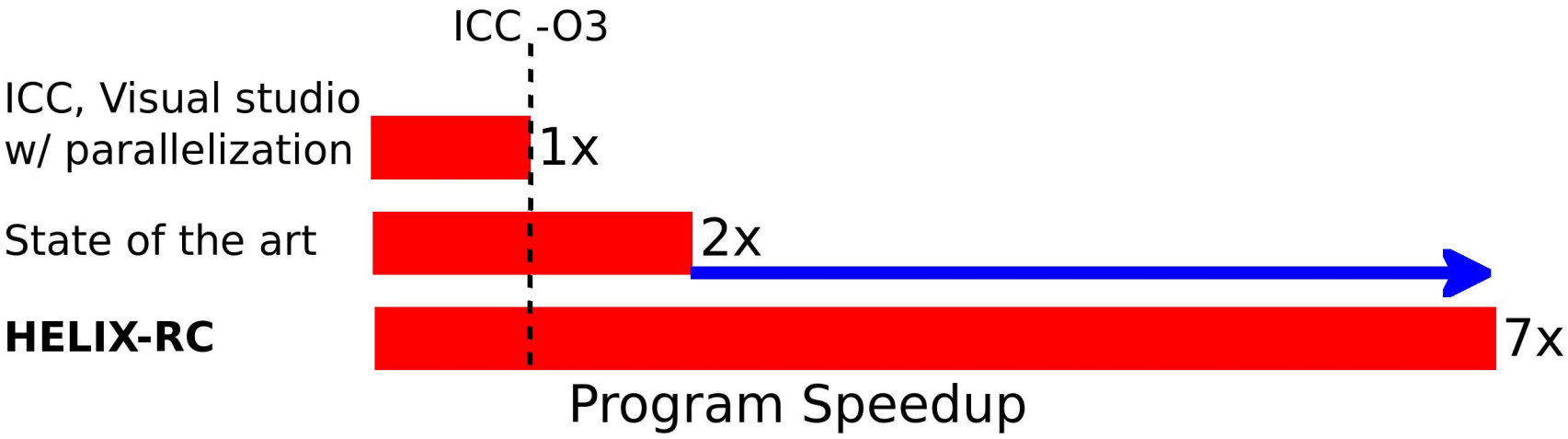
Automatic Parallelize Irregular Programs

Program Speedup

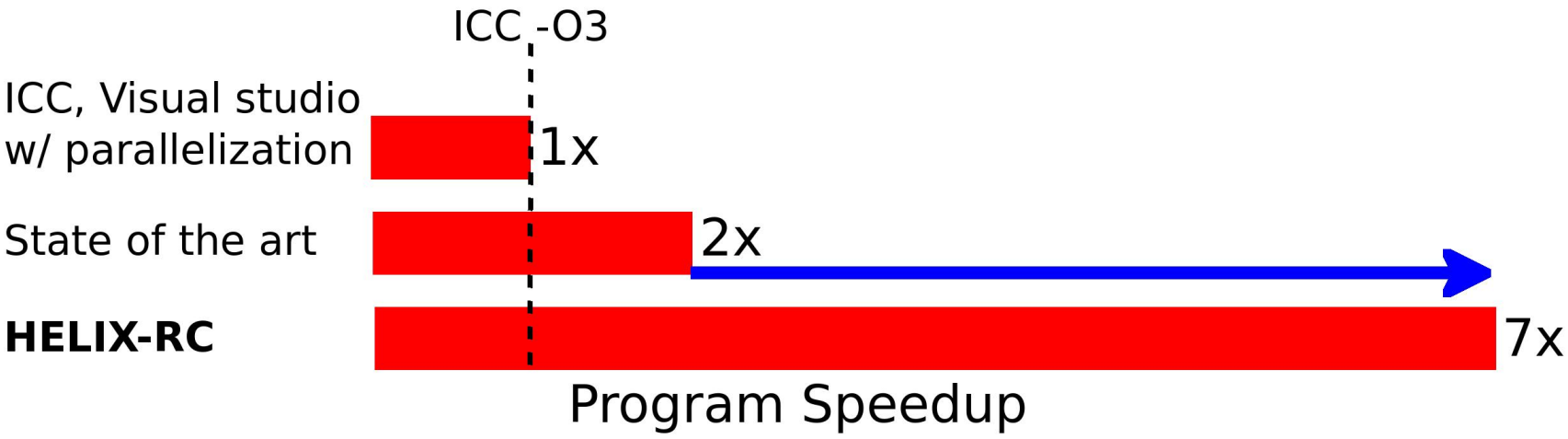
Automatic Parallelize Irregular Programs



Automatic Parallelize Irregular Programs



Automatic Parallelize Irregular Programs



Ring Cache

makes
automatic parallelization practical
for
conventional multicores