KEYNOTE: SAFETY, SECURITY, SAFETY(SIC) AND C/C++(SIC)





What "is" C++'s language safety problem (2)

C++ should provide a way to let programmers

by default enforce known rules in these areas, with explicit opt-out

aiming for a ~90-98% reduction in these vulnerabilities (parity with other langs)

But right away let's clarify, and set some boundaries:

"Immediate": The start, not the end (e.g., let's improve concurrency safety too)

"Default" + "enforcement": Need a mode where "if it compiles, it's in the safe subset unless you explicitly opt out" (aka **bright line**)

"Known rules": A great start, but also have a few gaps to fill (esp. bounds checking)

"~90-98% improvement": That can be achieved with **full compatibility**, but trying for 100% is a mistake (not necessary for parity, not sufficient, and breaking compatibility would be too high a cost)



