

Welcome

AI + Astronomy: Models, Data, Discovery



Adrian M. Ionescu, EPFL

EPFL at glance



>15'000
Students



>380
Professors



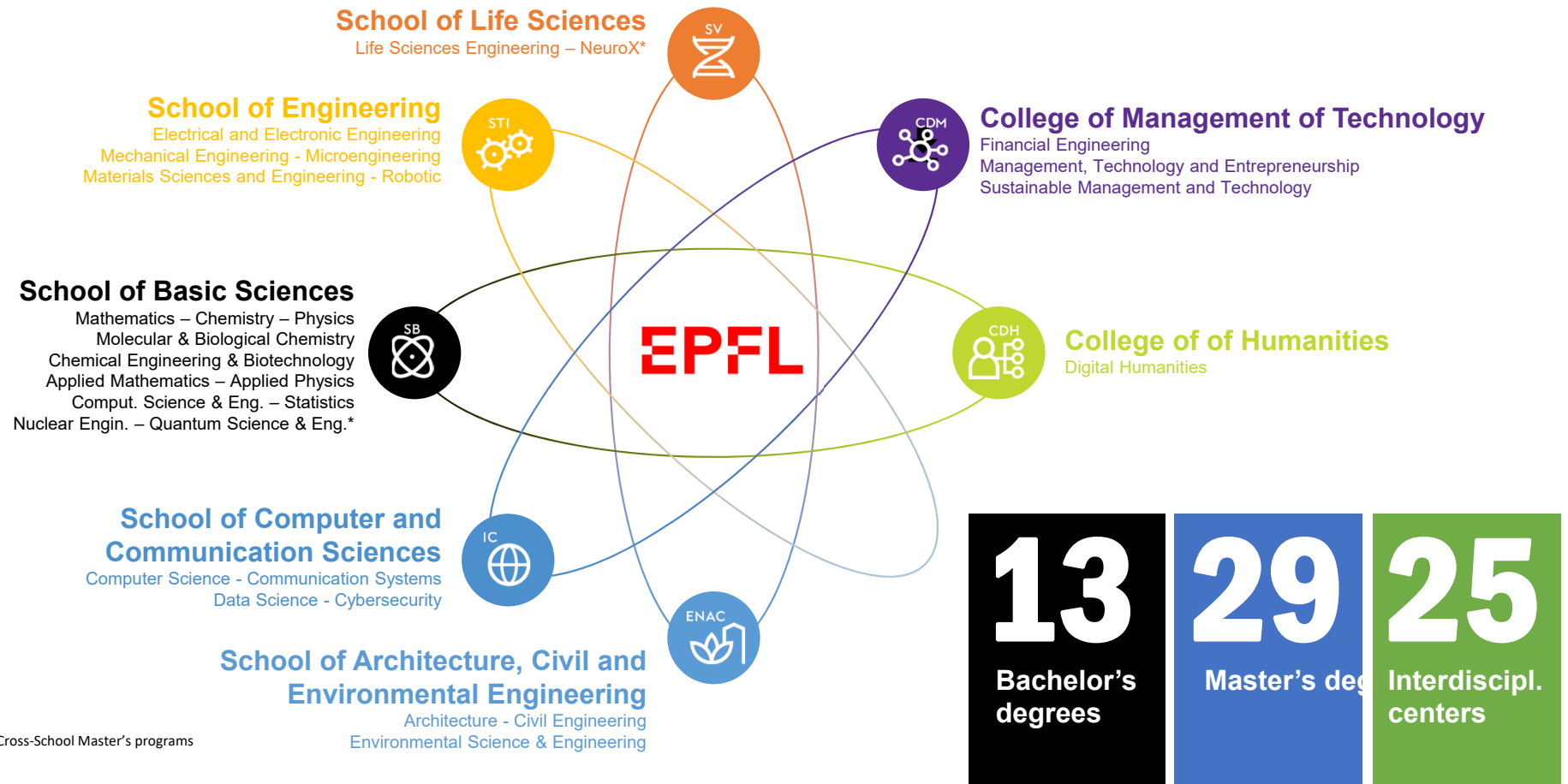
>6'000
Employees
(incl. Phd)



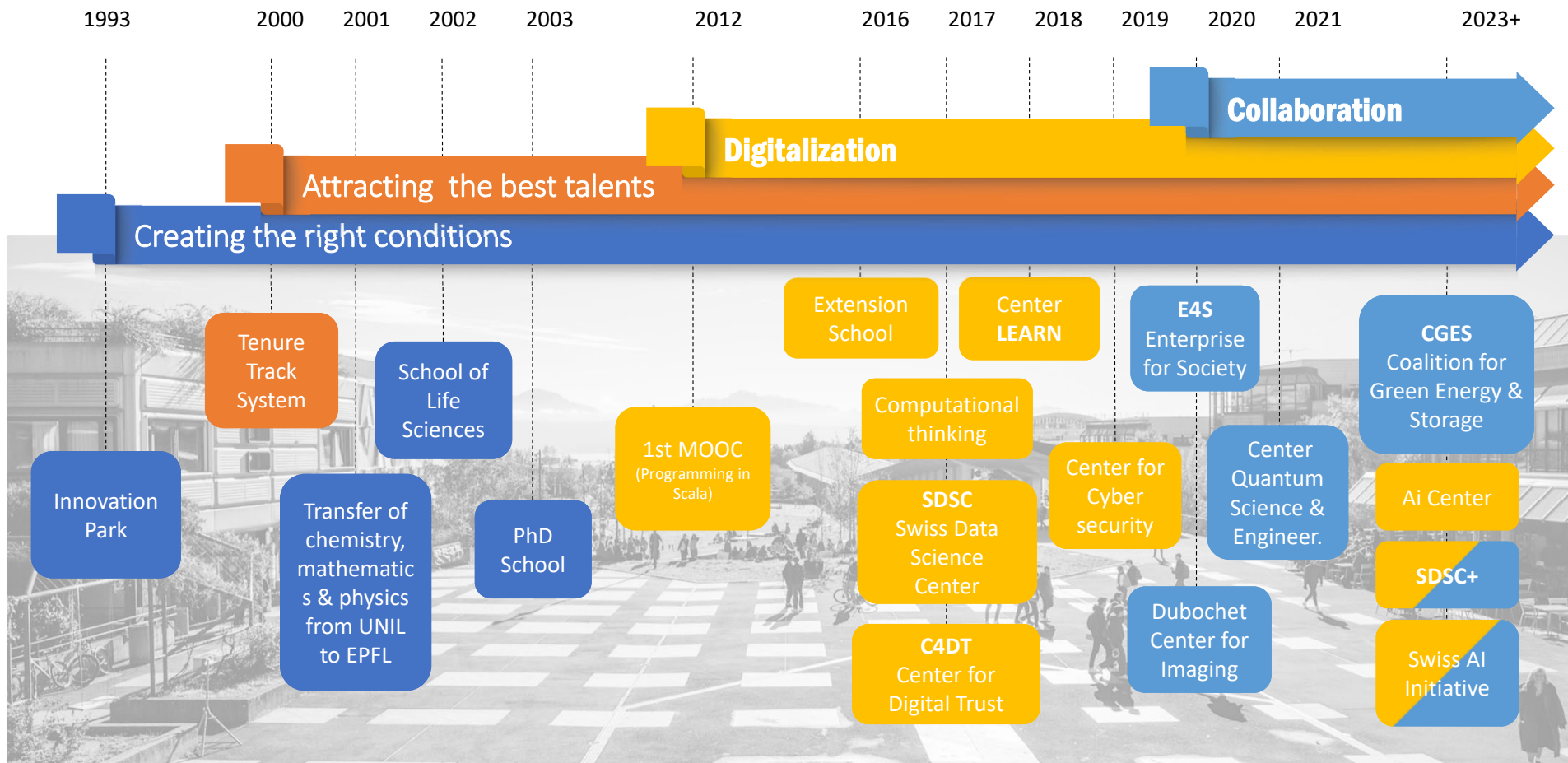
+130
Nationalities



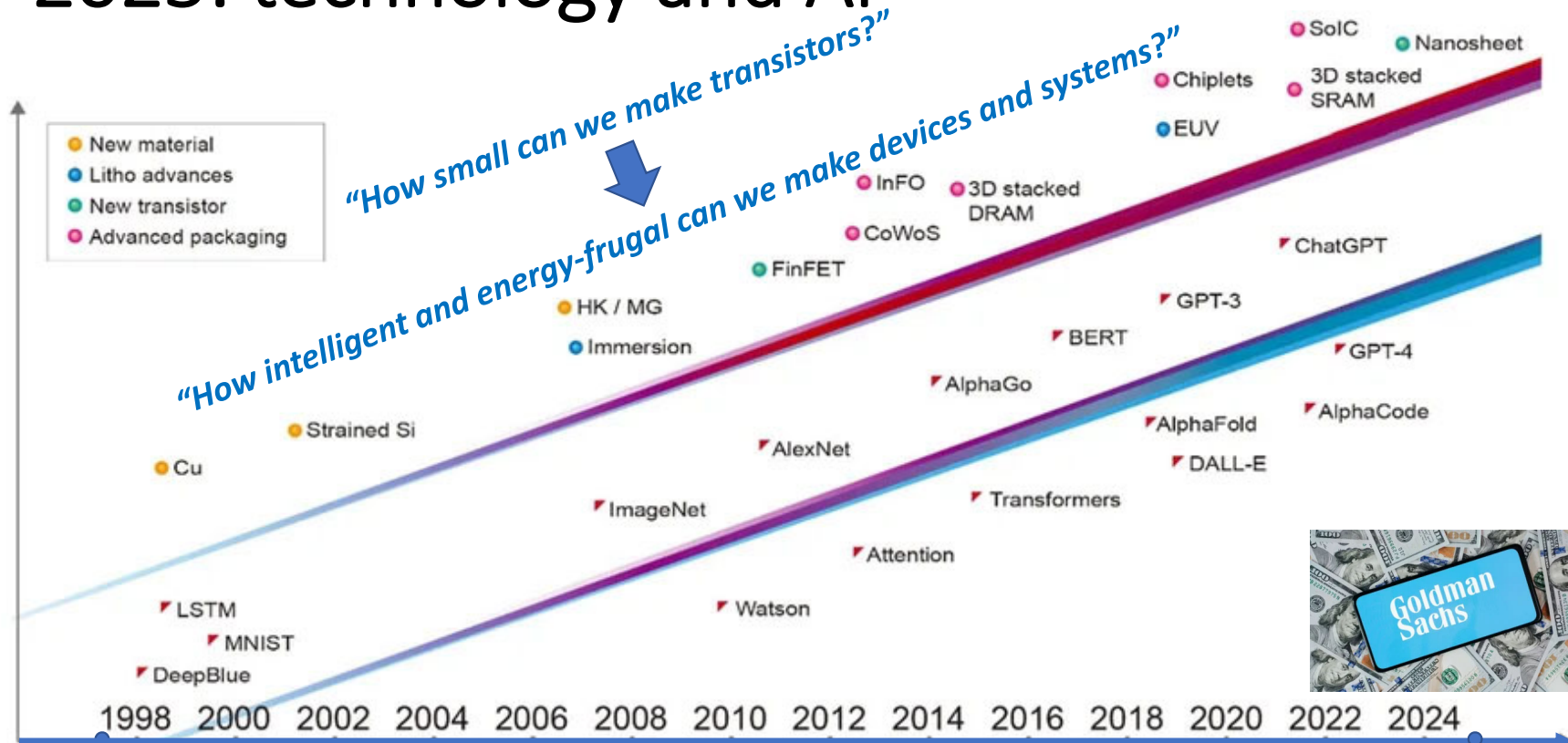
From Architecture, to Mathematics, Chemistry, Life Sciences and Computer Science



Establishing EPFL as a leading school in the 21st century



1997 – 2025: technology and AI



1997

May, 1997: Deep Blue defeats Garry Kasparov in chess match.

Year

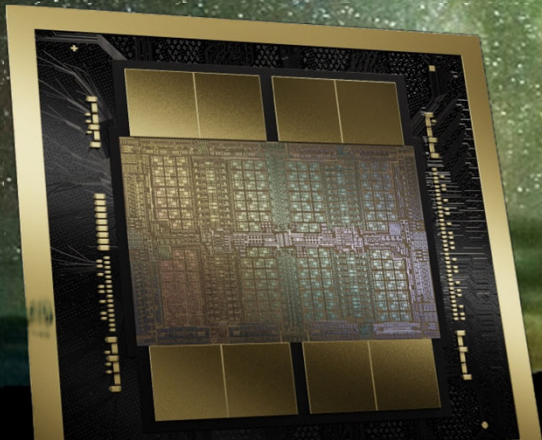
2025

July, 2025: The newest hire at Goldman Sachs isn't human...



200+B stars
in the Milky Way

200+B transistors
in NVIDIA Blackwell, 576 GPUs
10 TB/second chip-to-chip link



Intersection of AI and Astronomy

AI is becoming a core scientific instrument:

- ❑ Scale (handling massive data)
- ❑ Speed (real-time decisions)
- ❑ Sensitivity (detecting faint signals)
- ❑ Insight (discovering new physics)

“Somewhere, something incredible is waiting to be known.” Carl Sagan

Today, with AI, we are accelerating that journey toward the incredible.