

Chart of the Day

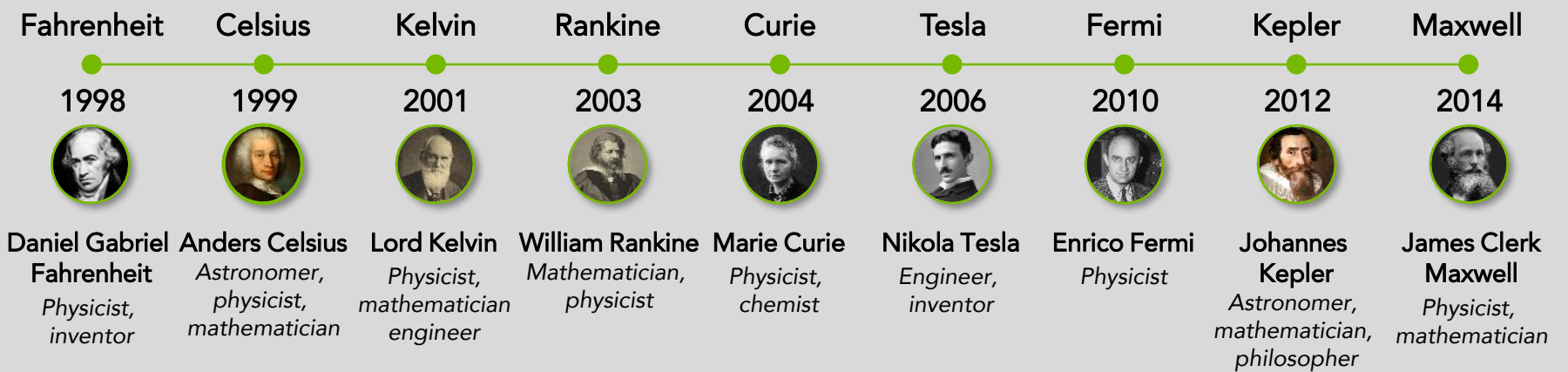


Astonishingly true for five decades, Moore's Law is effectively broken: Originally published in 1965, US semiconductor pioneer and Intel co-founder Gordon Moore predicted that microchip transistor count and performance would double every two years, while costs would decline. Though this remarkably prophetic observation held true until the mid-2000s, transistor scaling at lower cost has reached physical limits even with more than 200 billion transistors on advanced NVIDIA Blackwell chips. More importantly, performance no longer tracks transistor count alone, and relies more heavily on innovative software overlays and system-wide architecture.

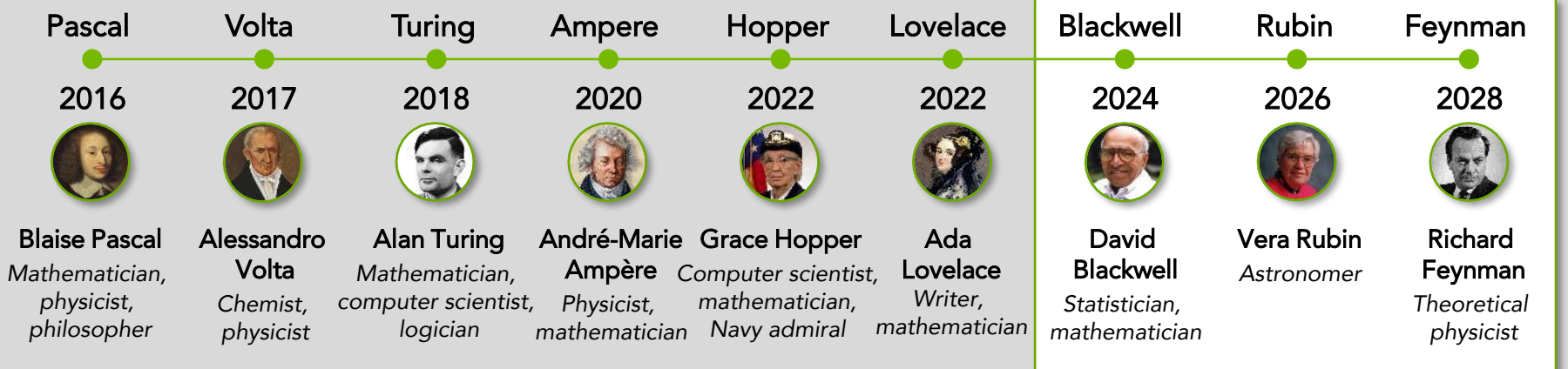
NVIDIA's remarkable chip product evolution each derive their names from acclaimed scientists. Over the last decade, NVIDIA has scaled the number of transistors per Blackwell chip to over 200 billion, increasing performance more than 1,000x (vs. the 30x Moore's Law would predict). More importantly, however, chip performance today relies less on scaling transistors and more on an innovative system-level architecture, which includes transistor hardware, tensor cores, scaling systems, algorithms, accelerators, complex software overlay (i.e., CUDA, CUDA-X libraries, domain tools) and parallel GPU architectures via stack co-design and clustering.

The evolution of NVIDIA's GPU architecture

Names of NVIDIA GPUs



The Future



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"Macro stability isn't everything, but without it, you have nothing."