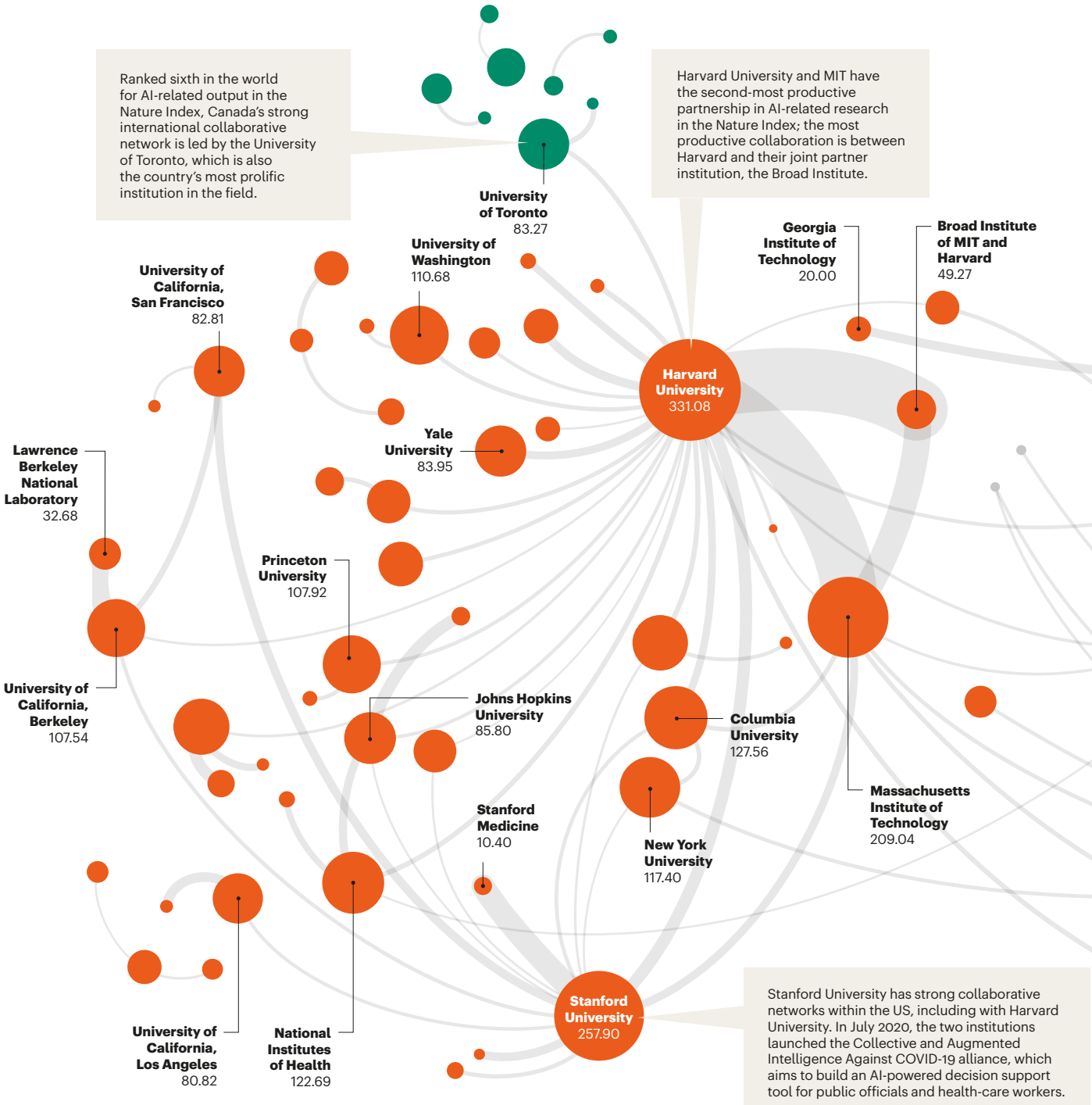
Network effect

Collaborations on AI-related papers in the natural-sciences journals tracked by the Nature Index reveal country strengths.
Data analysis by Bo Wu. Infographic by Bec Crew and Tanner Maxwell.



AI COLLABORATIONS

This graph comprises the top 200 collaborations among 146 institutions based on index data between 2015 and 2019, represented by lines and circles, respectively. Circles are sized according to each institution's Share in artificial intelligence, and the thickness of the lines corresponds to a particular collaboration's total Share between two institutions.

Institution Share

100

50

10

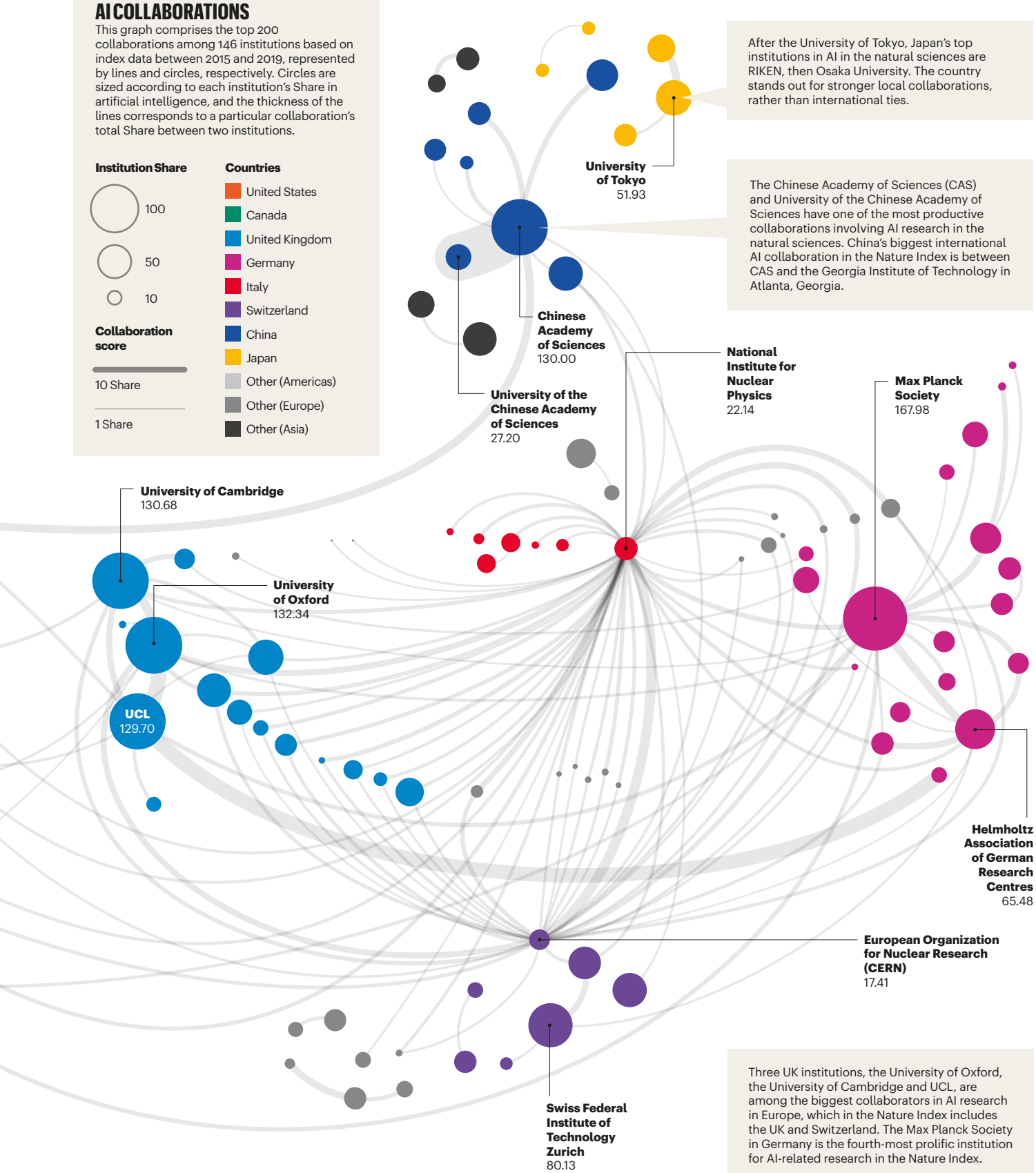
Collaboration score

10 Share

1 Share

Countries

- United States
- Canada
- United Kingdom
- Germany
- Italy
- Switzerland
- China
- Japan
- Other (Americas)
- Other (Europe)
- Other (Asia)



After the University of Tokyo, Japan's top institutions in AI in the natural sciences are RIKEN, then Osaka University. The country stands out for stronger local collaborations, rather than international ties.

The Chinese Academy of Sciences (CAS) and University of the Chinese Academy of Sciences have one of the most productive collaborations involving AI research in the natural sciences. China's biggest international AI collaboration in the Nature Index is between CAS and the Georgia Institute of Technology in Atlanta, Georgia.

Three UK institutions, the University of Oxford, the University of Cambridge and UCL, are among the biggest collaborators in AI research in Europe, which in the Nature Index includes the UK and Switzerland. The Max Planck Society in Germany is the fourth-most prolific institution for AI-related research in the Nature Index.

SOURCE: NATURE INDEX