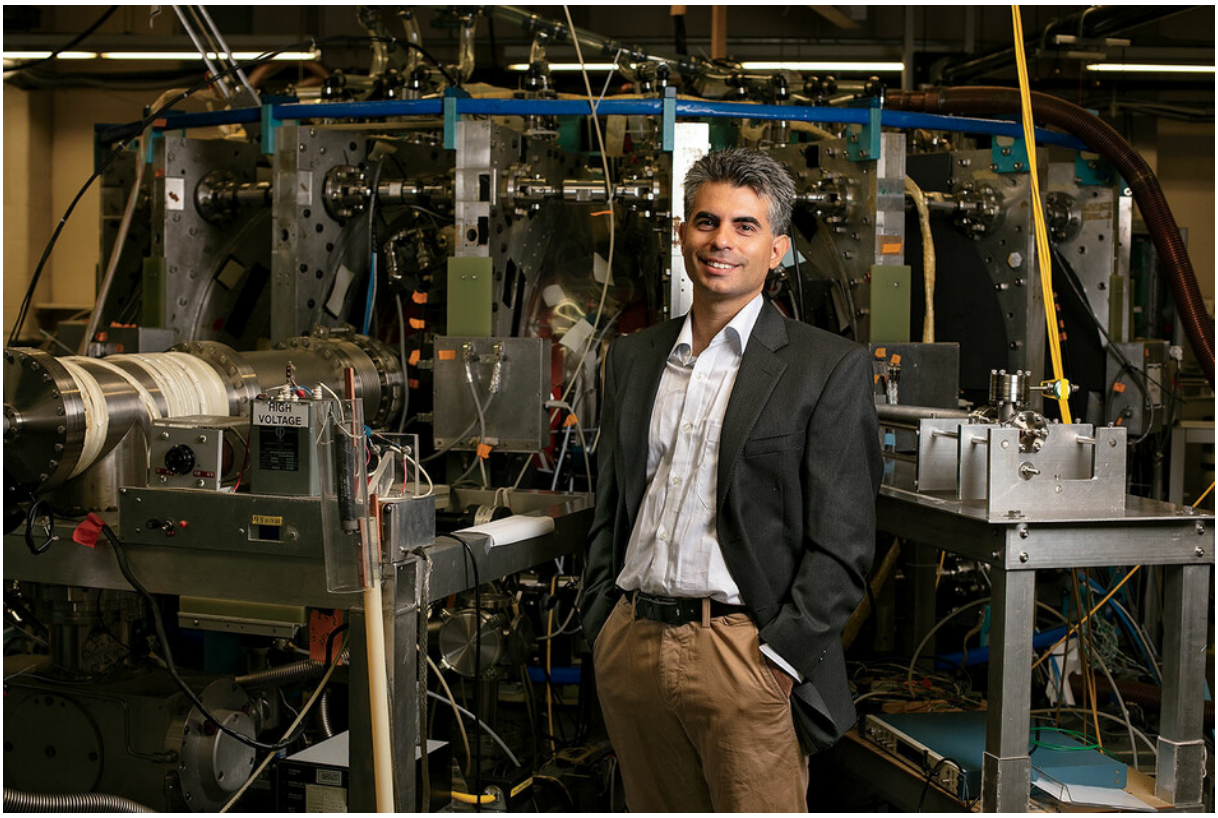
On Campus

Columbia’s School of Engineering Ignites Fusion Push

Spring/Summer 2025



Carlos Paz-Soldan (Jörg Meyer)

The school of engineering has launched the Columbia Fusion Research Center, an initiative aimed at speeding up the development of fusion energy — a clean, safe, and potentially limitless power source. Led by applied physicist Carlos Paz-Soldan, the center will tackle some of the most complex challenges in nuclear fusion by bringing together experts in mechanical engineering, astrophysics, materials science, and energy policy to collaborate with industry partners.

Fusion power, or the process of capturing energy released when atoms fuse together, has been a scientific goal for nearly a century. It is considered far safer than current nuclear energy, which works by splitting atoms, but it has proven

difficult to scale for commercial use. Researchers are making progress, though, and in recent years a number of startups have formed with the goal of generating and selling fusion energy for the first time. Columbia’s new center will team up with these companies, several of which already sponsor research at the engineering school, to help them overcome the scientific and technological hurdles that remain.



Guide to school abbreviations

All categories >