Ludwig Prandtl was born in 1875. Towards the end of the 1890s, he studied mechanical engineering at the Technical University (TH) in Munich, where he submitted his dissertation on technical mechanics in 1900. As it was not possible to obtain a doctorate at the Technical University of Munich, he completed his doctorate at the neighbouring Ludwig Maximilian University. On 1 January 1900, even before his doctorate, Prandtl took up a position as an engineer at the Maschinenbaugesellschaft in Nuremberg. At MAN, he was confronted with questions of fluid dynamics for the first time when he designed a blower. He was subsequently offered a chair in mechanics in Hanover. He left Nuremberg in 1901 and became the youngest professor in Prussia at the age of 26. In 1904, the mathematician Felix Klein was able to persuade Prandtl to accept a position as associate professor in Göttingen in order to take over the management of the Department of Technical Physics at the Institute of Physics. In 1905, Prandtl, together with the mathematician Carl Runge, became head of the newly founded Institute of Applied Mathematics and Mechanics. At a later date, the Institute of Applied Mathematics and the Institute of Applied Mechanics were separated, with Prandtl taking over the management of the latter institute. In addition to his work at the University of Göttingen, Prandtl became head of the Model Experimental Centre for Aviation in 1908 and from 1915 head of the Aerodynamic Experimental Institute (AVA). In 1924, he initiated the founding of a new institute at the Kaiser Wilhelm Society (KWG) in Göttingen, the Kaiser Wilhelm Institute for Fluid Dynamics Research. He held the position of director there until his retirement in 1946. In 1948, the Max Planck Society was formally founded at the Institute for Fluid Dynamics Research. In 2004, the Max Planck Institute for Fluid Dynamics Research was renamed the "Max Planck Institute for Dynamics and Self-Organisation" due to a scientific reorientation.

Through his research achievements, Prandtl laid the foundations for modern fluid mechanics and is therefore known as the "father of modern aerodynamics". His scientific work included the development of boundary layer theory and aerofoil theory. He also made significant contributions to the theory of turbulent flows. Today, his name can be found in numerous areas of fluid mechanics, for example in the Prandtl number and the Prandtl pitot tube named after him. He also trained excellent scientists, including Theodor von Karman, who obtained his doctorate in Göttingen in 1908.

In 1933, at the beginning of National Socialist rule in Germany, Prandtl already had an outstanding scientific career behind him and enjoyed worldwide recognition. In 1936, for example, he was awarded an honorary doctorate from the University of Cambridge. Due to his outstanding position in fluid dynamics research, Prandtl was a key scientific advisor to the Nazi war machine. He took on a leading role in the research organisation on the subject of fluid dynamics.

Although Prandtl himself was never politically active and did not join the NSDAP, he expressed sympathy for the National Socialists and their ideology in private letters, as they promoted his research. He described himself as "politically uninterested", but at the same time used Nazi rhetoric and anti-Semitic language. In correspondence with foreign colleagues, he rejected criticism of the current situation in Germany and defended the Nazi regime. In a letter to G.I. Taylor, Prandtl stated that Germany's fight against the Jews was "unfortunately" necessary to preserve its own people.

At the same time, however, Prandtl campaigned against the dismissal of Jewish and otherwise "undesirable" colleagues, which took place following the enactment of the "Law for the Restoration of the Professional Civil Service" in 1933. However, these efforts did not lead to the desired result. Prandtl was also an opponent of "German Physics", also known as "Aryan Physics". This was largely characterised by anti-Semitic ideas and rejected modern theoretical physics, in which numerous important Jewish physicists were active. Prandtl described this rejection of theoretical physics and the new German physics as a "threat to the next generation of physicists". In this context, he also stood up for Werner Heisenberg, who, as one of the most important theoretical physicists, was strongly

attacked by dogmatically motivated German physics. He was a successful in this endeavour thanks to his direct contact with Heinrich Himmler and the attacks against Heisenberg were stopped. However, the associated correspondence was characterised by clear anti-Semitic rhetoric.

After the outbreak of the Second World War, Prandtl scrutinised the research of the Institute of Fluid Mechanics with regard to its "war relevance". As a consequence, basic research at the Kaiser Wilhelm Institute was reduced, an example is the work on the theory of turbulence. The financial resources thus freed up were consequently used for research projects important to the war effort. In 1942, Prandtl took over the chairmanship of the Reich Office of Research Management, which was subordinate to the Reich Aviation Minister and Commander-in-Chief of the Luftwaffe. As a result, he was directly subordinate to Hermann Göring.

In his letters after the end of the war, Prandtl shows no feelings of remorse and no awareness of his own role in the war. In his self-perception, he functioned primarily as a research organiser during the war. As part of the denazification process, Prandtl underwent an examination, which did not reveal any reservations about his person. He continued his research activities until his death in Göttingen in 1953.

According to Michael Eckert, Ludwig Prandtl can be seen as a prime example of the intertwining of politics and science during National Socialism. In Prandtl's self-perception, politics was merely the actual party affiliation with the NSDAP, which is why he always endeavoured to describe himself as apolitical despite his work for the Nazi regime. In honour of his outstanding services to fluid mechanics and the MPI for Dynamics and Self-Organisation, this room bears his name.

A critical examination of Prandtl's life, especially during the National Socialist era, can therefore also be seen as a reminder of the Max Planck Society's mission to distance itself from political and economic influences and to concentrate on conducting basic research. Naming Prandtl's role under National Socialism means reminding today's scientists of their role and the responsibility towards society that goes with it.

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