## Powers of 10

When *Powers of 10* was first conceived in 1968, the world was a very different place. However, despite the introduction of the cell phone, the internet, and the plethora of technology that has dramatically altered our contemporary lives, this celebrated film by Charles and Ray Eames remains profoundly relevant today.

Whether revisiting this classic or viewing it for the first time, *Powers of 10* is magical. The film takes the viewer on a thrilling and disconcerting journey to the outer limits of time and space, traveling to the edge of the universe on one end of the trip and to the most inner depths of the human body at the other. Ultimately, the film addresses scale and the relative size of things, a concept that powerfully extends across disciplines. Eames Demetrios, Director of the Eames Office, explains the importance of thinking about scale in practical terms. He writes, "So many of our challenges today are ultimately matters of scale. To be a good citizen of the world and have a chance to make it a better place, a person must have a real understanding of scale." By presenting images in measurements we can barely fathom, *Powers of 10* pushes the boundaries of how we think about our relationship to everything around us.

Powers of 10 is based on the 1957 book, Cosmic View: The Universe in Forty Jumps, by Kees Boeke. The Eames's enlisted scientific advisors from disciplines including astrophysics, biology, genetics, physics, and particle physics to ensure the accuracy of the film. And, in order to achieve the smooth and realistic motion we see in the footage, the photographs were arranged frame by frame on a 40-foot-long animation stand — an incredibly innovative process for the time.

In addition to the *Powers of Ten*, the husband-and-wife team of Charles (1907-1978) and Ray (1912-1988) Eames embarked on an astounding array of enterprises during their collaborative years. While the Eames name is most notably known for Charles' design of the *Eames Chair*, together, they were visionaries ahead of their time. Pushing the possibilities of design and materials, Charles remarked that their approach was to "bring the most of the best to the greatest number of people for the least." *Powers of 10* is an important example of their values and practice. Using spectacular imagery, the film breaks down complex ideas into a format that is accessible, exciting and most importantly, relevant.