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Section 1: Introduction

Imaging the Invisible

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## How Small is Small?

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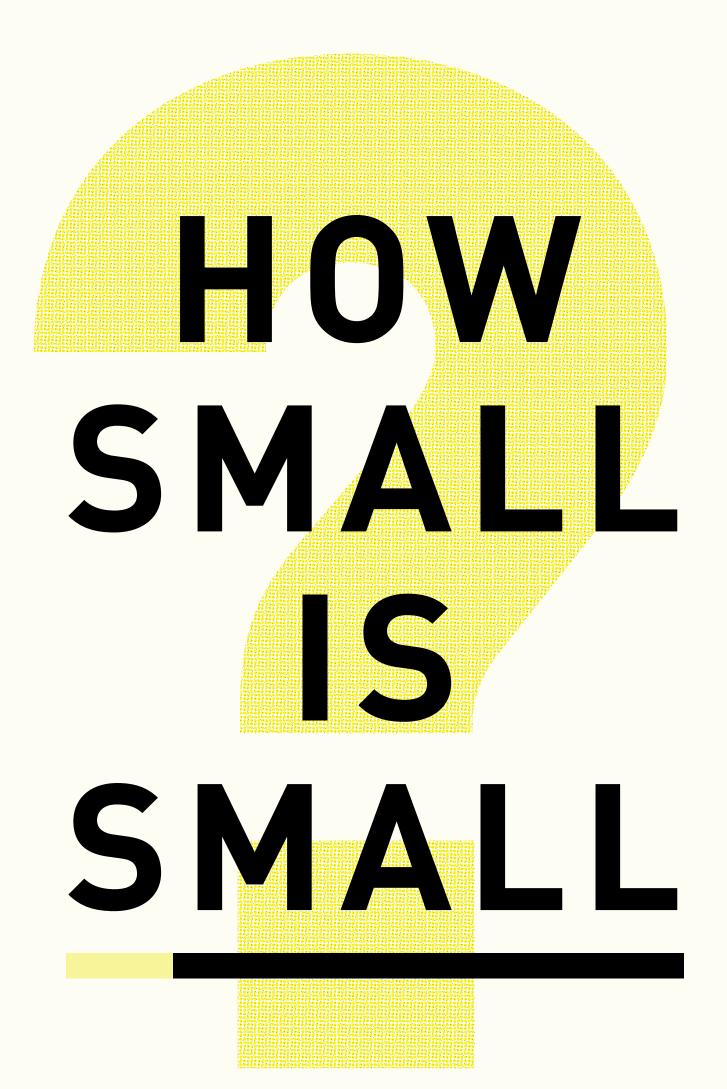
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The first challenge in illustrating a world invisible to the naked eye is understanding size. How big (or small) is the width of a human hair? What is the actual size of bacteria? What is the range of visible light? What is the diameter of a carbon nanotube? Compare the relative sizes of the things featured in this exhibit.

The International System of Units (SI) has adopted a standard nomenclature for measurement based on the meter.

10 <sup>0</sup> m	=	1 meter (m)
10⁻¹ m	=	1 decimeter (dm)
10 <sup>-2</sup> m	=	1 centimeter (cm)
10⁻³ m	=	1 millimeter (mm)
10⁻ <sup>₀</sup> m	=	1 micrometer (µm)
10 <sup>-9</sup> m	=	1 nanometer (nm)
10 <sup>-12</sup> m	=	1 picometer (pm)
10⁻¹⁵ m	=	1 femtometer (fm)