THE PHYSICS, TECHNOLOGY, AND APPLICATIONS OF THE SUBMILLIMETER SPECTRAL REGION.

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The scope of interest in the sub-millimeter (a.k.a. terahertz, far infrared, millimeter, near millimeter, etc.) region of the electromagnetic spectrum is growing at an ever-expanding rate. High-resolution molecular spectroscopy continues not only to be at the core of this interest, but also is expanding its impact on emerging fields and their technology. This talk will focus on the relation of the underlying physics and technology of the sub-millimeter to past, present, and future applications. Emphasis will be on the high-resolution applications most closely associated with this meeting: spectroscopy, chemical physics, astronomy, atmospheric remote sensing, and diagnostics.