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Frontiers of the Physics of Carbon Nanotubes

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Carbon nanotubes entered the scene of materials physics about 20 years ago, exhibiting unusual structures and properties stemming from their strong sp2 carbon bonds, their lower mass density, their very large length-to-diameter ratio, and their ability to be either semiconducting or metallic depending on their tube diameter and the orientation of their in-plane hexagons relative to their tube axis. You might ask what potential applications could be envisioned for such unusual nano structures, and what practical application have in fact been realized to date. This will be the focus of my presentation.