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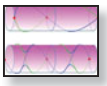

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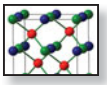

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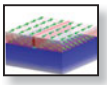

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ON THE COVER

Topological insulators. This issue of *MRS Bulletin* focuses on topological insulators, which represents a new state of matter based on the topology of the electronic structure. Topological insulators are materials with a distinguished electronic structure, equivalent to a Möbius strip. Most semiconductors and insulators, including the vacuum of the universe, are topologically "trivial," with an electronic structure like a cylinder or donut shape. The Möbius strip electronic structure on the other hand cannot be continuously transformed into a donut, and, consequently, a metallic surface state (Dirac-type cone) develops in topological insulators while the bulk material remains an insulator, as represented on the cover. See the technical theme that begins on page **843**.

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The Materials Research Society (MRS), a not-for-profit scientific association founded in 1973 and headquartered in Warrendale, Pennsylvania, USA, promotes interdisciplinary materials research. Today, MRS is a growing, vibrant, member-driven organization of over 16,000 materials researchers spanning over 80 countries, from academia, industry, and government, and a recognized leader in the advancement of interdisciplinary materials research.

The Society's interdisciplinary approach differs from that of single-discipline professional societies because it promotes information exchange across many scientific and technical fields touching materials development. MRS conducts three major international annual meetings encompassing approximately 125 topical symposia, and also sponsors numerous single-topic scientific meetings. The Society recognizes professional and technical excellence and fosters technical interaction through University Chapters. In the international arena, MRS implements bilateral projects with partner organizations to benefit the worldwide materials community. The Materials Research Society Foundation helps the Society advance its mission by supporting various projects and initiatives.

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