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**COVER** Superconducting fiber (about 0.6 millimeter in diameter) of the composition  $\text{Bi}_2\text{CaSr}_2\text{Cu}_2\text{O}_8$  (upper section) growing at 5 millimeters per hour from a melt formed by a  $\text{CO}_2$  laser whose image on the melt surface can be seen as the bright horizontal line at the center of the melt. The melt is sandwiched between the growing fiber and the polycrystalline rod of the superconducting starting material of the same composition. The lines in the growing fiber are the edges of many aligned single crystal platelets. See page 1642. [Photo by Roger Route and fiber grown by Dan Gazit and Robert Feiglson, Stanford University, Stanford, CA 94305]

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