## ARMAND BOREL

## KOMARAVOLU CHANDRASEKHARAN

Armand Borel was wont to sojourn in far-off lands, spreading his message of mathematics. He was supposed to be in rude health. And suddenly he is no more. In Auden's phrase, he has become his admirers.

He was nonpareil as an algebraist, with wide horizons. One has just to look at his article on André Weil's contributions to topology. His brilliance is in his refusal to distinguish between fun and learning. His visits to India and China provide instances. But his overriding enthusiasm for his subject swept aside all distractions.

He had homes in the U.S. and in Switzerland. But John Steinbeck's words apply to him: "I have no 'place' home, I have homes everywhere, and many I have not even seen yet."

It was Warren Ambrose who first alerted me to his work in 1954. An invitation to India followed, which he could not immediately accept, but in which he expressed continued interest. He became a full professor at the ETH Zürich, his alma mater, in 1955, whence he moved to the Institute in Princeton in 1957, following the trail once blazed by Albert Einstein and Hermann Weyl. True to his expressed intention, he came to Bombay in 1961. His lectures there fell on fertile ground, as his many subsequent visits testify. His love of jazz kindled in him an interest in Carnatic music, with its syncopated rhythms and melodic improvisations, which grew into a passion. I treasure the memory of many shared moments of joy.

On the initiative of Georges de Rham, the Swiss federal authorities tried for years without success to attract him home. Armand's response was: "If Barry Goldwater becomes president, then maybe." His attitude changed somewhat after Jürgen Moser moved to Zürich. The determined initiative of President H. Ursprung of the ETH Zürich resulted in his acceptance of a professorship (15 April 1983 to 1 July 1986). He made it clear that he was not used to supervising theses for the doctorate or the diploma. It was suggested to him that he might inaugurate a new series, called the Swiss Seminars in Mathematics, jointly with colleagues from the French-speaking part of the country, and hold them in a central place like Bern, which he did with conspicuous success. They were subsequently renamed "Borel Seminars"; they are Armand's legacy to Switzerland.

His personality might have seemed dour to those who did not know him well; they could not sense the soft core underneath, nourished and sustained by his devoted wife, Gabrielle. He had a social conscience and human sympathy for the predicament of the poor and disadvantaged. On his first visit to India, he and Gaby sponsored the education of a "street urchin" into adulthood and self-sufficiency. He detested the display of self-importance or officiousness in any form and did not hide his displeasure even if a close colleague indulged in it. He had a highly developed sense of the absurd, which moved him to outright laughter when faced with people who spoke or wrote about things they did not know. In his early years as a referee or editor, he tended to

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be impatient, but his use of the word "inutile" became less frequent with the passage of time.

Unforgettable is the midnight session of jazz in Chicago (with saxophonist Sonny Stitt), which we together enjoyed after the conclusion of the symposium in honour of Marshall Stone (May 1968) and all the associated festivities. A tape of Armand's centennial lecture on "Hermann Weyl and Lie groups" (November 1985) remains a prized memento. As I listen to it again, I wonder if Armand's delight in the continual and indefatigable generation of knowledge did not exceed the short vehemence of any temporal pleasure.