A Personal Tribute To Tinsley

MY DAUGHTER BEATRICE A Personal Memoir of Dr. Beatrice Tinsley, Astronomer, Edward Hill, American Physical Society, New York, 1986. 138 pp., Illus.$9.95. Beatrice Muriel Hill Tinsley was a wise, warm, and wonderful person. If you knew her in person or through her work, this book from the pen of her father will make you miss her all over again. If you never knew her, you will wish you had. In an astrophysics career that spanned less than 14 years, from her Ph.D. dissertation in 1967 to her death

By Virginia Trimble | December 15, 1986

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In an astrophysics career that spanned less than 14 years, from her Ph.D. dissertation in 1967 to her death in 1981, Tinsley published some 114 papers, many of them still heavily cited. She created as nearly single-handedly as anything in modern science can be said to be single-handed the discipline of modeling the evolution of galaxies to account for their chemical compositions, luminosities, colors, and gas contents as a function of time, and she applied those models to fundamental astronomical problems, including that of determining the age and geometry of the universe as a whole. When she began her thesis, galactic evolution was universally believed to be too large and amorphous a problem for quantitative treatment. Fifteen years later, it was a well-established branch of astronomy, with practitioners at a dozen major institutions.

Hill’s chapters incorporate a number of Tinsley’s own letters to her family. These are framed by a scientific introduction by Sandra Faber, a reprinting of an obituary by Richard Larson and Linda Stryker originally published in Quarterly Journal of the Royal Astronomical Society, and an acknowledgement by Miriam Forman.

The heart of the book stretches from January 1941 in northwest England to March 1981 in the Yale infirmary. The letters excerpted begin with a summer vacation note written at age five and a half, continue intermittently through school vacations, and become regular after 1958 when she enrolled at Canterbury University (New Zealand). Her style matured early and is recognizably that of her published papers from high school onward. There is no bibliography, but a good place to begin an acquaintance with both galactic evolution and Tinsley’s way of doing science is her last major review of the subject in Fundamentals of Cosmic Physics 5, 287, 1980.

The tone of both the memoirs and the letters is nearly always a happy loving one, but it is impossible to miss (and you are not supposed to miss) the underlying note of struggle as she insisted on getting the kind of education she deserved and on making use of that education despite a sometimes hostile environment and her own full recognition of the conflicting claims of home and family.

The book is dedicated to “every parent of a gifted child; every woman who has struggled between family and a career; everyone interested in science.”

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