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François Wesemael (1954–2011)

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François Wesemael died on Wednesday the 28th of September, 2011.

François Wesemael was born in Vietnam on January 20, 1954. During his childhood he moved with his family first to France, then to Luxembourg, and finally to Canada. He received his B.Sc. from the Université de Montréal in 1974. In the fall of that year, he entered the Department of Physics and Astronomy at the University of Rochester as a graduate student. During his graduate studies, he became an expert in stellar-atmosphere theory as applied to very hot, high-gravity stars, and he developed intimate familiarity with the spectra of hydrogen and helium under these conditions. He subsequently applied these abilities to the analysis of spectra obtained from the *Voyager*, *IUE*, and *FUSE* spacecraft. In the early 1980s, he was part of a group that produced a definitive analysis of the white dwarf Sirius B, and two decades later he was a member of another group that analyzed the difficult spectrum of Procyon B. In both cases, the observational results demonstrated that these two white dwarfs have well-understood physical properties.



Credit: unknown.

In 1981, François joined Gilles Fontaine at the Université de Montréal, and the two established a research group that rapidly attracted top students and gained international recognition in the field of white-dwarf research. He supervised the master's and doctoral work of numerous students, three of whom have been awarded the prestigious Plaskett Medal by the Canadian Astronomical Society for the best doctoral thesis in astrophysics in Canada. Many of his and Fontaine's former students have since gone on to productive and distinguished careers in astronomy and astrophysics.

In 1993, François led a group of top-rank observational astronomers in publishing "An Atlas of Optical Spectra of White Dwarf Stars" ([Wesemael, F. et al., 1993](#)), an exceptionally clear, concise, understandable, and valuable summary of the wide variety of peculiar spectroscopic properties of the white dwarfs. François' research interests extended well beyond spectroscopic analyses, however. He also worked on

asteroseismology, convection theory, metal abundances and radiative levitation in hot, high-gravity atmospheres, accretion disks, and hot subdwarf stars, and he was an active participant in the Montreal-Cambridge-Tololo (MCT) survey for subluminescent blue stars. François not only was a world-renowned astrophysicist, but also he was a first-rate physicist, as evidenced by the many honors he received, including the Herzberg Medal of the Canadian Association of Physicists and the Rutherford Memorial Medal in Physics of the Royal Society of Canada. Among his more than 200 publications, the most heavily cited was a photometric calibration of H- and He-rich white dwarf models ([Bergeron, P., Wesemael, F., & Beauchamp, A., 1995](#)). Another was one of his last papers—published in the year he died—on a comprehensive spectroscopic analysis of DB white dwarfs ([Bergeron, P. et al., 2011](#)). He is also the author of the book *Profession astronome* published by *Les Presses de l'Université de Montréal*, which describes the work and vision of the modern astrophysicist.

François' career was marked by excellence in both research and teaching, and he devoted a significant portion of his time to teaching. Anyone who had the privilege of taking one of his courses can attest to his teaching skills, the clarity of his performance, the lucidity of his lecture notes, and his enthusiasm for the subject matter he taught. Indeed, he won teaching-excellence awards from the Faculty of Arts and Science (science sector) and from the Université de Montréal (full professor category). An excellent popularizer of science, he also contributed several times to various popular science magazines. He gave numerous lectures in high schools and colleges, and his enthusiasm and passion for astronomy inspired the careers of many young Quebec scientists. He himself said, "If I manage to influence even one student in the audience, my work is done."

During his last sabbatical year in Paris, François began to pursue another of his great passions, the history of science, with a particular interest in the development of astronomy and astrophysics in the nineteenth and twentieth centuries. It was under the theme of the history of astronomy ("Pourquoi s'intéresser à l'histoire de l'astronomie quand on est astronome?") that he gave his last lecture at the end of August 2011 during the annual meeting of graduate students of the Centre for Research in Astrophysics of Quebec (CRAQ).

François Wesemael died at the age of 57, succumbing to cancer that had been diagnosed only two weeks earlier. Not surprisingly, his sudden death sparked many testimonials from his friends and colleagues around the world.

Citations

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3. Bergeron, P., Wesemael, F., Dufour, Pierre, Beauchamp, A., Hunter, C., Saffer, Rex A., Gianninas, A., et al. 2011. “A Comprehensive Spectroscopic Analysis of DB White Dwarfs.” *The Astrophysical Journal* 737 (1): 28. <https://doi.org/10.1088/0004-637X/737/1/28>. ↵