

BOOK REVIEW

Against the Tide, by L. C. Woods. Institute of Physics, Bristol, 2000. xv + 319 pages. Hardcover, ISBN 0 7503 0690 4. £26, \$40.

This book is almost unique in being 95% autobiography and 5% plasma physics. It was written so that the author's dying daughter could learn about his life. Sadly, she only read a dozen or so pages. Professor Woods describes his early life as a fisherman's son in New Zealand. He is extremely candid. We learn about both his successes and his failures, even the occasional theft! Against his father's will, he decided not to attend a commercial school, but to read science instead (just like the reviewer's father, incidentally). A good part of the book describes early manhood, university and then active service as a pilot in World War II.

Next the author won a scholarship to Baliol College, Oxford. Uniquely, he obtained his PhD and BA in that order. Then came a college fellowship, and finally a chair. All this was interspersed with appointments in Australia and Oman, as well as numerous visits to the USA. There are two sides to the coin. On the one hand, from fisherman's son to Oxford professor and Chairman of the famous Mathematical Institute of that University, not to mention several serious books and an honorary degree. On the other hand, failure of most personal relationships, lack of recognition for his plasma research, and failure in the Royal Society fellowship elections (though this last mishap is treated with humour).

Passing on to the section on plasma physics, two arguments against the tokamak are given lucidly (that the plasma is collisionless; that an important heat flow, either out of the plasma or else towards it, will invalidate considerations; both facts are supposedly ignored by specialists). In contradistinction to most 'outsider' views, these will eventually be vindicated or otherwise, depending on the fate of the large-device fusion effort.

It would be hard to improve on the closing sentence: 'I find England a maddening country with its quaint titles, ersatz democracy, pretence and snobbery, yet I cannot bear to live anywhere else for long.' A fine, wonderfully unpretentious autobiography.

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