Spin Dynamics PhL 10.28.07

Note: Some **appendices** are commented on in the main line chapter text, some in separate files, and some in the metareview only.

I started reading this book on the date shown above 10.28.07, and finished reading it on 4.1.08, a total of about 5 calendar months with a long Christmas break.

Author is Malcolm Levitt, dedicated to his parents, published 2001, my printing is April 2006.
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Professor Malcolm Levitt



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Biography

Malcolm Levitt obtained his PhD in **Oxford** in 1981 with Ray Freeman, with a thesis on Nuclear Magnetic Resonance Methodology. He did **postdoctoral** research with Shimon Vega in **Israel** and Richard Ernst at the ETH in **Zürich** (who received the Nobel Prize in Chemistry in 1991). He was then on the research staff at the Francis Bitter Magnet Laboratory at **MIT**, Boston, USA, for 4 years. He moved back to England, researching for 1 year at the Centre for Superconductivity in **Cambridge**, before becoming a lecturer at the University of **Stockholm**, Sweden, where he was made a full professor in 1997. He moved back to England to take up a Professorship in Physical Chemistry at **Southampton** in April 2001. Apart from science, he composes music, plays jazz, paints and sketches, and is interested in art, languages and politics. Malcolm Levitt has published a popular textbook on Nuclear Magnetic Resonance, called Spin Dynamics.

Comment: A fellow in my same age bracket, did **Oxford** PhD 1981 then two 3-year postdocs (**Israel** and **Switz**), then a research job at MIT for 4 long years, then 1 year in **Cambridge**, then "lecturer" in **Stockholm**, then made a full professor at **Southampton,** 17 years after getting his PhD. This was the way my "class" had to do things to survive in that era, I remember it well. He has a nice set of web pages here: http://www.mhl.soton.ac.uk/public/index.html

Preface. Author gave some lectures at Tufts. He hoped to do a 100 page monograph, something I could imagine. He worked more on this in Cambridge, then more in Stockholm, and some even in India where perhaps he met his physics wife. He has a valid beef against "bad terminology". His own research area is solid-state NMR. Thanks all his grad students and teachers, did the book on a Mac with Word and TeX macros he wrote himself. I downloaded them just now, may fiddle some day with that!

Introduction. Quotes Purcell about NMR only being available to he who looks 1952 Nobel lecture, and about the protons in snow just sitting there precessing in the earth's B field. Draws attention to two of the

4 pages of color pix which are strangely located page 272, very hard to find! The first shows fMRI, the second shows a protein whose structure was found by NMR, not crystal X.

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