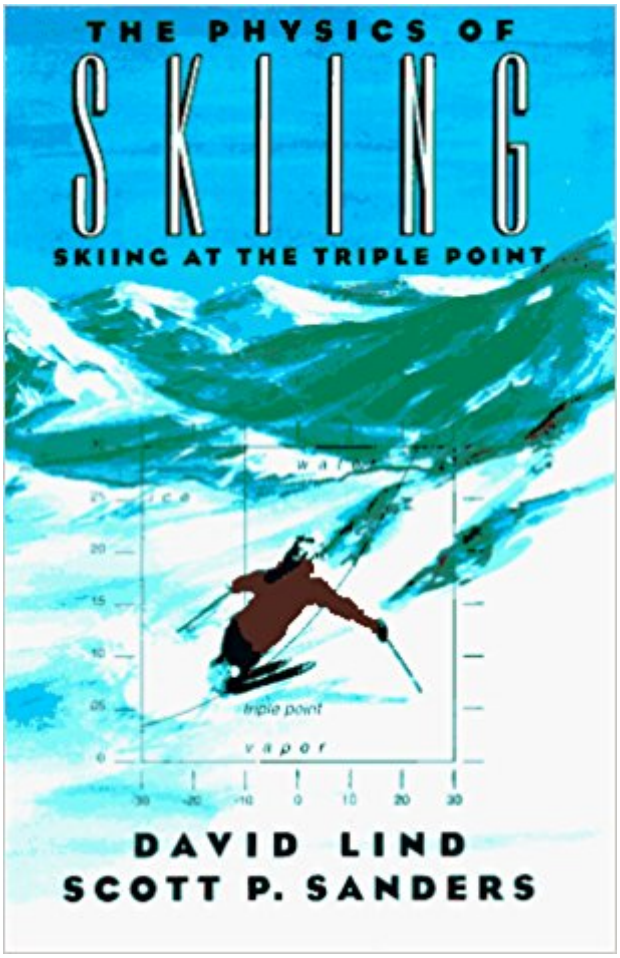
The Physics Of Skiing: Skiing At The Triple Point



Synopsis

The earliest record of skiing is a 2,000-year-old pictograph from Rodoy, Norway. Only in the past 50 years, however, have the greatest advances been made in skiing technology. Now, The Physics of Skiing reveals what really happens when a skier hits the slopes, where the snow is always near the triple point -- the temperature at which the solid, liquid, and vapor phases co-exist.Dr. Lind explains the surprising phenomena that occur at the triple point. For Instance, why will a downhill racer lose the race if he becomes airborne unnecessarily, while the winning racer pre-jumps drops in the course? And why does the winning slalom racer never skid his skis? These and many more slippery questions are answered in The Physics of Skiing. You will learn why alpine skis are designed differently from cross-country skis, how different types of snow affect one’s skiing, and why cross-country skiers who step out of their bindings, then off the track, may fall up to their hips in snow. An historical perspective on the evolution of alpine skiing technique helps the reader grasp the now-universal concept of the carved ski turn and its relation to steered turns. And the book explains, once and for all, why ski instructors are forever telling their students to keep their shoulders perpendicular to the fall line.

Book Information

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Customer Reviews

I am a firm believer that understanding of the mechanics of a carving ski and of the forces transferred between the skis and the skier as he makes his way down the slope are necessary to better understand why one or another skier’s action may help to intiate a turn, or shorten its radius, or, in contrast, will lead to a skidded turn. "The physics of skiing" is the only book I could find which

addresses the mechanics and physics of skiing. It starts with the physical properties of snow and its formation in the atmosphere, then discusses the properties of snow equipment (mostly downhill skis, briefly snowboards and cross-country skis), and then goes into dynamics of gliding, wedging, and carving. The book is written as a college textbook with numerous (although fairly simple) equations and diagrams of forces. It requires a sufficiently strong background in physics. Although it contains a large amount of interesting data, I was not quite satisfied with it for two reasons. First, it lacks a concept. It is more a review of different literature sources on skiing-related topics than an analysis combining understanding of physics of skiing with a discussion of how this knowledge is applicable to modern skiing techniques. It provides the readers with the background theory, but does not lead to any suggestions how to benefit from this understanding and improve their skiing technique. Too bad that the authors did not have a good ski instructor in their company to make the book more useful and down-to-earth. Secondly, since it is based on references published between 1977 and 1997, part of the discussion is more applicable to the old almost straight skis than to modern supersidecut skis.

I go skiing at least once a year; I am also a University lecturer in Physics. I bought this book several years ago with the expectation that it would be a fascinating read. Unfortunately, it has failed to "grab" me. Some of the problems are fairly minor: for instance, the illustrations leave a lot to be desired. The references are often not just outdated but also obscure. For example, the main reference to the phase thermodynamics of water is a "US Army Corps of Engineers Special Report No. 81-6" - surely, a more widely-available, mainstream reference could have been found for such a textbook topic! Other problems are more fundamental: (1) The book lacks a unifying approach and a discussion of the basic concepts (this was also pointed out by one of the other reviewers). As a result, it reads more like a collection of disjointed technical notes than a book. (2) It fails to provide any insights into the practise of skiing beyond what one would pick up from a private lesson with an instructor. I am really not sure, what kind of target audience the authors had in mind when writing this book. But I do know that it has not been useful to me either as a skier or as a Physics lecturer.

As a ski instructor the subject of how and why these damn things work as well as how to set up your skiis has always been of interest. This book will give you 95% of the answers to those questions. The book covers down hill, cross country as well as a catagory called adventure skiing. I will be ordering extra copies to give to my skiing friends W. E. M.

this book is literally about the physics of snow and skiing.I was a science major in college, have two advanced degrees, feel comfortable with high tech equipment and I felt like I was reading a college textbook when I read this book.

The Physics of Skiing: Skiing at the Triple Point Topological Fixed Point Principles for Boundary Value Problems (Topological Fixed Point Theory and Its Applications) Massage: The Foam Roller Bible: Foam Rolling - Self Massage, Trigger Point Therapy & Stretching (Trigger Point, Tennis Ball, Myofascial, Deep Tissue, Pressure Points, Hip Flexors, Calisthenics) The Solid State: An Introduction to the Physics of Crystals for Students of Physics, Materials Science, and Engineering (Oxford Physics Series) Backcountry Skiing Utah, 2nd (Backcountry Skiing Series) For the Love of Skiing: A Visual History of Skiing Time's Arrow and Archimedes' Point: New Directions for the Physics of Time Surviving Triple-Negative Breast Cancer: Hope, Treatment, and Recovery Triple Therapy for Hepatitis C: Strategies and Coping Tips for the Caregiver Armies of the War of the Triple Alliance 1864-70: Paraguay, Brazil, Uruguay & Argentina (Men-at-Arms) Paraguay and the Triple Alliance: The Postwar Decade, 1869-1878 To the Bitter End: Paraguay and the War of the Triple Alliance (Contributions in Military Studies) Tempered Steel: The Three Wars of Triple Air Force Cross Winner Jim Kasler Concerto in C Major, Op. 56 (Triple Concerto): and Fantasia in C Minor, Op. 80 (Choral Fantasy) in Full Score (Dover Music Scores) J.S. Bach - Brandenburg Concerto No. 2 & Triple Concerto in A Minor: Music Minus One Violin Sharp 'N' Sexy: La Triple L Mercenaries book 2 (Landry/Fabrizio 16) Triple Play: Three Plays by Norm Foster ROMANCE: Triple Heat (Menage Bad Boy Threesome Pregnancy Romance) (Contemporary Alpha Male Romance) HELICOBACTER PYLORI vencido: Todo-natural triple estrategia para el exterminio de H. pylori (MÃƒÂ¡s detalles aÃƒÂ adido!) (Spanish Edition) Triple Goddess Velvet Bag (Bolsas de Lo Scarabeo Tarot Bags From Lo Scarabeo)