

Kruer's small book.

The Physics of Laser Plasma Interactions grew out of lecture notes from a course Kruer taught in the applied science department of the University of California, Davis. As the foreword states, such books tend to have a rough, informal style, and this is true of Kruer's book. While Kruer states that the book does not assume an extensive knowledge of plasma physics and that the treatment is based on

simple physical models, I suspect that a student coming to the subject cold would have trouble learning from this book. Many plasma theorists who are used to more formal, detailed treatments of plasma processes may find the style too rough for their tastes. However, Kruer is presenting a broad-brush picture of the physics of laser-plasma interactions; he presents us with the forest and not detailed, leaf-by-leaf descriptions of

the trees. His broad physical pictures are supported by a large amount of work on numerical models and by experimental results. Kruer discusses these, but I suspect that the reader will not get a true feel for the imposing bulk of the supporting work. Some hint of its sheer magnitude comes through in the large number of cited references. If the book is used in a course, the instructor can undoubtedly fill in details and answer questions students have on the supporting material.

This is an excellent book, filled with insights into many of the complex phenomena involved in the interactions of intense electromagnetic waves with plasma. I recommend it to any student of the subject or, for that matter, to anyone interested in nonlinear processes in plasma.

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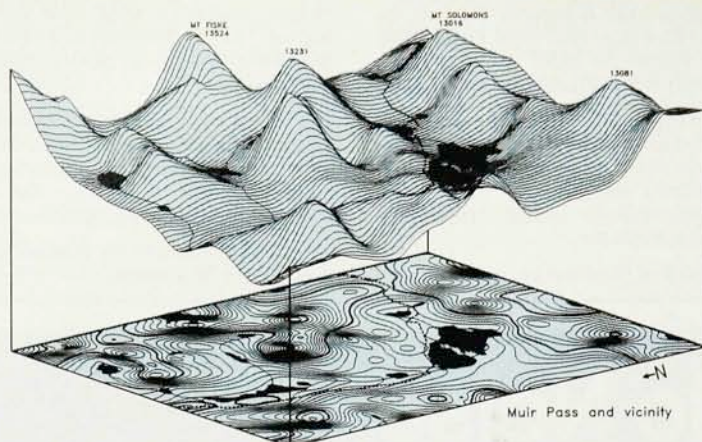
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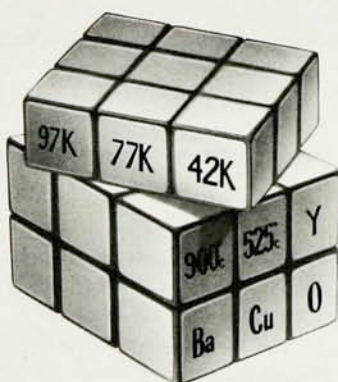
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