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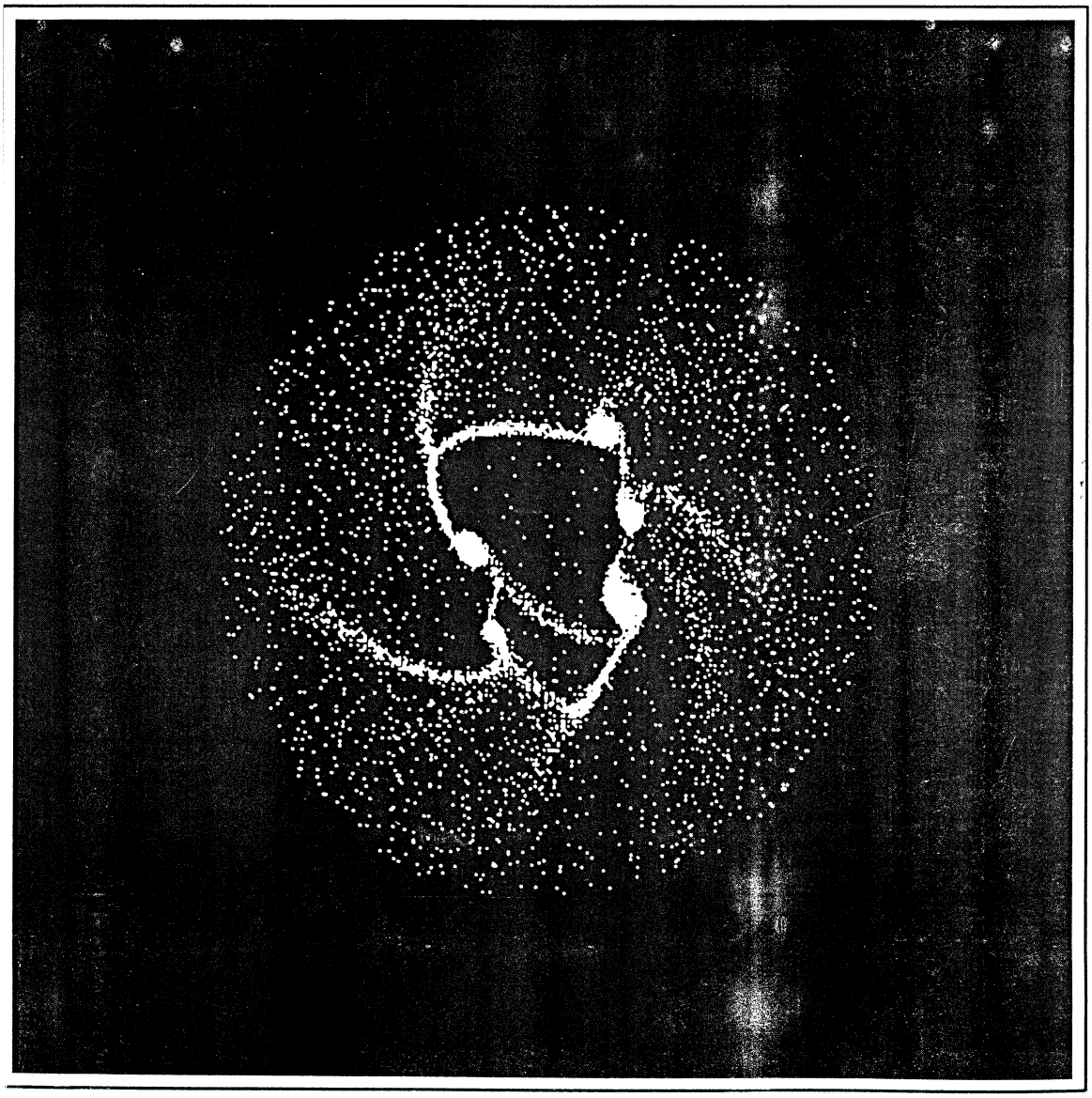

Australian Journal of Physics

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Australian Journal of Physics

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Mathematical formulae should be carefully *typed* with symbols in correct alignment and adequately spaced. At least two clear lines should be left above and below all displayed equations. If special symbols must be hand-written, they should be inserted with care and identified by pencilled notes in the margin. Judicious use should be made of the solidus to avoid two-line mathematical expressions in the running text. All long formulae should be displayed, and numbered sequentially throughout the paper, *not* section by section. Vectors should be indicated by single underlinings (not overhead arrows) and tensors by double underlinings. In formulae the exp(yz) form is preferred to e^{yz}. Similarly the square root sign $\surd$ should be avoided in favour of a one-half power. For example, write

$$x = \{1 + (ab)^{\frac{1}{2}}\}/[1 + c\{\exp(ky) + \exp(lz)\}] .$$

Note that the hierarchy used here is parentheses, followed by curly braces, and then square brackets.

Tables should be numbered with arabic numerals and be accompanied by a title. They should be arranged having regard to the dimensions of the printed page, and the number of columns should be kept to a minimum. Long headings to columns should be avoided by the use of explanatory footnotes. Each table must be referred to in the text and its approximate position should be indicated in the margin of the manuscript. Only in exceptional circumstances will presentation of essentially the same data in tabular and graphical form be permitted; where adequate, the latter form should be used.

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For further information contact the Managing Editor, *Australian Journal of Physics*, P.O. Box 89, East Melbourne, Vic. 3002, Australia.

Editorial announcement: Introducing our new look

In this our first issue for 1992 the *Australian Journal of Physics* appears in *Computer Modern*, replacing the *Lucida* typeface we adopted at the beginning of 1989. The distinctive Lucida served the journal well, providing a clear and readable typeface. Unfortunately, though, it lacked some characteristics that are important for typesetting mathematical physics, such as matching bold forms for its greek and symbol faces.

Computer Modern is a typeface family devised in the United States by Donald Knuth specifically for use with his typesetting program TEX. The *Australian Journal of Physics* is produced on Apple Macintosh computers running an in-house macro package AJSRTEX. Functional mathematical typography is crucial to successful communication of physics. We believe that there is no superior approach to mathematical typography than the combination of TEX and the Computer Modern font set.

The adoption of Computer Modern is in a sense a return to our roots. For almost thirty years the journal appeared in English Monotype Modern No. 7A foundary type, whereas the 75 faces that comprise the Computer Modern family were inspired by American Monotype No. 8A. Blue Sky Research, whose implementation of TEX for the Macintosh (TEXtures) produces our journal, has converted the entire Computer Modern family into Adobe Type-1 PostScript format. These hinted outline forms may be reproduced on PostScript printers of varying resolution. They may also be previewed on the Macintosh screen in magnifications from 0·1 to 16 in 0·1% increments using Adobe Type Manager screen rasterisation technology. The 75 scalable fonts are soon to be released for MicroSoft Windows computers also.

In 1985 the *Australian Journal of Physics* became one of the first journals in the world to introduce its own TEX typesetting system. A major advantage of the system is its ability to accept compuscripts prepared by authors, submitted on Macintosh or PC diskette in *any* of the standard TEX formats: Plain, AMSTeX or LaTeX. In 1991 almost one-half of the papers published in the journal were received on disk. We expect this fraction to increase in the future.

In the meantime, we hope our authors and readers will enjoy our new and thoroughly modern look.