

On the other hand, if

$$a_n \geq \frac{1}{n^2},$$

then

$$\frac{1}{a_n \log n} \leq (n^2) \frac{1}{\log n} = e^2,$$

and so

$$\frac{1}{a_n} - \frac{1}{\log n} \leq e^2 a_n.$$

Since $\sum a_n$ and $\sum \frac{1}{n^{3/2}}$ are both convergent, the desired result follows.

Phil Rippon

BOOKS RECEIVED

"NONLINEAR PARTIAL DIFFERENTIAL EQUATIONS AND THEIR APPLICATIONS. COLLÈGE DE FRANCE SEMINAR VOLUME VII"

Edited by *H. Brezis* and *J.L. Lions*

Published by *Pitman Publishing*, London, 1985, 292 pp.
Stg £16.50. ISBN 0-273-08679-0

This book contains the texts of selected lectures delivered at a weekly seminar held at the Collège de France. It includes contributions by leading experts from various centres on recent results in nonlinear functional analysis and partial differential equations. The emphasis is laid on applications to numerous fields including control theory, theoretical physics, fluid mechanics, free boundary value problems, dynamical systems, numerical analysis and engineering. The book will be of particular interest to postgraduate students and specialists in these areas.

"ENNIO DE GIORGI COLLOQUIUM"

Edited by *Paul Krée*

Published by *Pitman Publishing*, London, 1985, 169 pp.
Stg £14.50. ISBN 0-273-08680-4

This research note includes sixteen papers reporting mathematical research in France and Italy related to the work of Ennio de Giorgi.

In July 1983, Professor Ennio de Giorgi was awarded the title 'Doctor Honoris Causa' by the Council of the Université de Paris VI. The very profound and influential nature of his

work meant that this award had a considerable impact on the international scientific community, particularly in France and Italy. As a result, a French-Italian colloquium on de Giorgi's work was held at the H. Poincaré Institute in November 1983.

De Giorgi's work was concentrated mainly on six areas: evolution problems, minimal surfaces, regularity of solution of second order partial differential equations, analytic solutions of partial differential equations with constant coefficients, Gamma-convergence theory and connected problems, and hyperbolic equations with discontinuous coefficients with respect to the time variable.

BOOK REVIEWS

"STATISTICAL METHODS IN RESEARCH AND PRODUCTION" (4th Edn)

Edited by *Owen L. Davies* and *Peter L. Goldsmith*

Published by *Longman*, 1984, xii + 478 pp. £10.95 (paperback)

"In Japanese firms, Statistics is everywhere"

"... statistical charts at loading docks and throughout the factory floor";

"Last year Japanese Industry carried out over 1 million statistical experiments";

"Japan has an annual National Statistics Day";

"Train-schedules in Tokyo railway stations are stem and leaf displays";

"American industry is now investing in massive training and education programs in Statistics, Quality Control and Reliability Methods".

- from a presentation by Blanton Godfrey (Bell Labs) at the 1984 American Statistical Association meeting in Philadelphia.

Most people nowadays accept that Japanese consumer goods are of high quality, and much of this progress in quality has been attributed to the work of W. Edwards Deming, the American statistician who has been a consultant to Japanese industry since 1945. The statistical methods that have been of such value to Japanese industry are essentially developments of the basic methods presented so competently in this book.

The object of the book, stated in the opening lines of the introduction, is "to facilitate a better understanding and a wider use of statistical methods by staff engaged in Research and Production, particularly in the chemical industry". The book originated as a 'company book' written by a team of authors