

Atiyah, Michael

Topology and differential equations. (English) [Zbl 0687.35001](#)

Industrial and applied mathematics, Proc. 1st Int. Conf., ICIAM, Paris/Fr. 1987, 45-52 (1988).

[For the entire collection see [Zbl 0664.00003](#).]

The author presents his view on the general relation between pure and applied mathematics. In order to illustrate this idea, he speaks on the application of topology to some classical linear and nonlinear partial differential equations. He ends the paper with the following advice for any applied mathematician: “don’t try to read the books (they are usually unreadable); find a friendly topologist!”. It’s a point of view.

Reviewer: [G.Morosanu](#)

MSC:

- [35-02](#) Research exposition (monographs, survey articles) pertaining to partial differential equations
- [00A35](#) Methodology of mathematics
- [35G15](#) Boundary value problems for linear higher-order PDEs
- [35G30](#) Boundary value problems for nonlinear higher-order PDEs
- [35Q99](#) Partial differential equations of mathematical physics and other areas of application
- [55Mxx](#) Classical topics in algebraic topology

[Cited in 2 Documents](#)

Keywords:

[topology](#)