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**Méthode particulière pour une équation de convection-diffusion. (Particle method for a convection-diffusion equation).** (French) [Zbl 0632.76104](#)

*C. R. Acad. Sci., Paris, Sér. I* 305, 431-434 (1987).

We propose a particle method of resolution of convection-diffusion equations which is a generalization of the one proposed by the author and *P.-A. Raviart*, Particle approximation of convection-diffusion problems (to appear). The method is based on the approximation of a diffusion operator by an integral operator and consists in two steps: the approximation of the solution of the convection-diffusion problem by the solution of the obtained integro-differential equation and the resolution of the integro-differential equation by a particle method.

**MSC:**

[76R50](#) Diffusion

Cited in **2** Documents

**Keywords:**

particle method of resolution; convection-diffusion equations; diffusion operator; integral operator; integro-differential equation