

Mixing

Chaos and Turbulence

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Mixing

Chaos and Turbulence

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Jacques Villermaux passed away a few months after this school. A chemical engineer and specialist in mixing, he was also an enthusiastic popularizer of Georg Bauer *De Re Metallica*, from which the engravings illustrating this volume are taken.



PREFACE

Why mixing?

–Because the subject, as shall become clear in the following pages, is ubiquitous and varied, with problems ranging from the fundamental to the very concrete, straddling the frontiers of many fields: a truly federative theme.

This, at least, was the spirit in which this Advanced Study Institute was planned, intending to bring together diverse communities sharing an interest in the problem of mixing, either as a theme of fundamental interest or as a necessary step in various applications.

The success of this lively school owed much to the quality of the speakers. It is reflected, we believe, in the quality of their contributions to this volume, which cover many facets of mixing. We thank them for their participation in our project, which was initially proposed — and since continually supported by Etienne Guyon, himself one of the organizers, ten years ago, of a school on “Disorder and Mixing” in Cargèse. We thank our sponsors, NATO, NSF, CNRS and DRET, and the staff of the Institut des Etudes Scientifiques de Cargèse, for making this school a success.

H. Chaté, E. Villermaux, and J.-M. Chomaz

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