Preface to the Third Edition

I was very pleased that the publisher asked me for a further edition of this book on Statistical Physics. It deals not only with the topic of Statistical Mechanics but also with Data Analysis and it gives an thorough introduction into mathematics of random variables. Insofar it occupies a special position among physics textbooks on Statistical Physics.

Since meanwhile the physics of complex systems has received a greater importance, it was therefore obvious to expand that part of the book which deals with the Data Analysis. In particular the concept of Granger causality and the Unscented Kalman filter are discussed.

I thank my colleague Jens Timmer for some advice in this regard and I am very grateful to Dr. Björn Schelter for the formulation of the relevant sections.

Emmendingen   Josef Honerkamp
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