

Foreword

Eighty years have passed since Teichmüller published his first foundational papers which led to what became known as Teichmüller theory, and the field is still wide open to new concepts, ideas and problems, stirring up a continuous flow of people. The amount of work done in this area is impressive, especially in the last forty years, driven by ideas of Thurston whose work set Teichmüller space as a central object of investigation in low-dimensional geometry and topology. The variety of the ideas involved in Teichmüller theory and the relations these ideas make between different mathematical fields are a pledge for the lastingness of this subject. Our motivation for editing this handbook is the conviction that the mathematical community is in need of good surveys on important topics, especially in very active fields like Teichmüller theory.

Reading the foundational texts of a theory is a major source for new ideas. Thus, together with surveys on modern research, the present Handbook contains a number of English translations of important original texts with commentaries. These texts will become in this way easily accessible to the mathematical community.

I would like to take this opportunity to thank Mrs. Renate Grötzsch for correspondence regarding her father's works, Vincent Alberge for his valuable help concerning the present volume, in particular in the choice of the papers by Grötzsch that are translated, and Marco Zunino for his excellent work in the typesetting of the final version of this book.

Saying that the success of such a book depends on the energy, time and care spent by the contributing authors is stating the obvious. Each of these authors has written an invaluable chapter, accepting without hesitation my (sometimes heavy) editorial remarks, and I would like to thank them all here.

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