

Haoyue Zerbe

**Modeling of Laser Welding
with the Smoothed Particle
Hydrodynamics Method**



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Modeling of Laser Welding with the Smoothed Particle Hydrodynamics Method

Von der Fakultät Konstruktions-, Produktions- und Fahrzeugtechnik
der Universität Stuttgart
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Preface

This thesis is the result of my research at the Institute of Engineering and Computational Mechanics (ITM) at the University of Stuttgart. A major part of the research was performed in cooperation with the Institut für Strahlwerkzeuge (IFSW) in a joint German Research Foundation (DFG) project on “Modelling of the capillary in laser beam penetration welding with the Smoothed Particle Hydrodynamics Method”.

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Böblingen, February 2020

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