

Faculty of Engineering

# DOCTORAL DEGREE CERTIFICATE

With this certificate,  
the Friedrich-Alexander-Universität Erlangen-Nürnberg  
awards

**Dongfang Xu**

for his thesis

“Optimized Resource Allocation for Future Wireless  
Communication Systems”

“Optimierte Ressourcenzuweisung für zukünftige drahtlose  
Kommunikationssysteme”

and the oral examination on 12/20/2022  
the degree of

**Doktor der Ingenieurwissenschaften  
(Dr.-Ing.)**

with the overall grade: “with distinction”

Reviewers: Prof. Dr.-Ing. Robert Schober  
Dr. Yuanwei Liu

Prof. Dr.-Ing. Joachim Hornegger  
President

Prof. Dr.-Ing. habil. Kai Willner  
Dean of the Faculty