

JOHANNES HORN

CURRICULUM VITAE

CONTACTS

ADDRESS	OFFICE 215, MATHEMATICAL INSTITUTE, JOHANN WOLFGANG GOETHE-UNIVERSITÄT, ROBERT-MAYER-STR. 6-8, 60325 FRANKFURT AM MAIN, GERMANY.
TELEPHONE	+49-69-798-22328
E-MAIL	HORN [AT] MATH.UNI-FRANKFURT.DE

ACADEMIC EDUCATION

OCT. 2020-MAY 2021	POSTDOC, UNIVERSITY OF FRANKFURT, DFG-GRANT MO 1884/2-1 "KLASSIFIKATION VON TEICHMÜLLERKURVEN".
OCT. 2020	COMPLETION OF DOCTORATE, THESIS: "SINGULAR FIBERS OF HITCHIN SYSTEMS", KARL-RUPRECHTS UNIVERSITÄT HEIDELBERG, GRADE 1,0. SUPERVISION: DANIELE ALESSANDRINI, ANNA WIENHARD.
OCT. 2019 - OCT. 2020	GRADUATE STUDENT, HEIDELBERG INSTITUTE FOR THEORETICAL STUDIES, RESEARCH GROUP "GROUPS AND GEOMETRY".
AUG. 2019 - OCT. 2019	GRADUATE INTERNSHIP IN RESEARCH PROGRAM "HOLOMORPHIC DIFFERENTIALS IN MATHEMATICS AND PHYSICS", MSRI, BERKELEY.
FEB. 2019 - MAR. 2019	GRADUATE INTERNSHIP WITH DR. BRIAN COLLIER, UNIVERSITY OF MARYLAND, COLLEGE PARK.
OCT. 2016 - OCT. 2019	GRADUATE STUDENT, RTG 2229 "ASYMPTOTIC INVARIANTS AND LIMITS OF GROUPS AND SPACES", UNIVERSITY OF HEIDELBERG.
APR. 2015 - OCT. 2016	MASTER OF SCIENCE MATHEMATICS, UNIVERSITY OF STUTTGART. THESIS "LIMITING CONFIGURATIONS FROM A HERMITIAN POINT OF VIEW", GRADE 1,3.
OCT. 2012 - MAY 2015	BACHELOR OF SCIENCE MATHEMATICS, UNIVERSITY OF STUTTGART. THESIS "THE ORTHOGONAL GROUP IN CHARACTERISTIC 2", GRADE 1,0.
OCT. 2011- SEPT. 2012	STUDIES FOR SECONDARY SCHOOL TEACHING IN MATHEMATICS, POLITICS AND ECONOMICS, UNIVERSITY OF STUTTGART.
JUNE 2009	ABITUR, ELLENTAL-GYMNASIUM BIETIGHEIM-BISSINGEN.

PREPRINTS

1. "SEMI-ABELIAN SPECTRAL DATA FOR SINGULAR FIBERS OF THE $SL(2, \mathbb{C})$ -HITCHIN SYSTEM", TO APPEAR IN INT. MATH. RES. NOT., [ARXIV:2003.07806](https://arxiv.org/abs/2003.07806).

INVITED TALKS

- | | |
|-----------|---|
| MAR. 2020 | "SINGULAR FIBERS OF HITCHIN INTEGRABLE SYSTEMS", GEOMETRY-TOPOLOGY SEMINAR, UNIVERSITY OF MARYLAND, COLLEGE PARK. |
| FEB. 2020 | "SINGULAR FIBERS OF HITCHIN INTEGRABLE SYSTEMS", SEMINAR SYMPLECTIC GEOMETRY, GAUGE THEORY AND CATEGORIFICATION, COLUMBIA UNIVERSITY, NEW YORK. |
| NOV. 2018 | "LIMITING CONFIGURATIONS ON THE SINGULAR LOCUS OF THE HITCHIN MAP", OBERSEMINAR GEOMETRIE AT KARL-ALBRECHTS-UNIVERSITÄT ZU KIEL |

IN PREPARATION

1. $\mathfrak{sl}(2)$ -TYPE SINGULAR FIBRES OF THE SYMPLECTIC AND ODD ORTHOGONAL HITCHIN SYSTEM.
2. (WITH NGUYEN-THI DANG AND ANDREW SANDERS) REGULAR EMBEDDINGS AND ANOSOV REPRESENTATIONS.
3. (WITH XUESEN NA) THE GEOMETRY OF SINGULAR HITCHIN FIBRES VIA HECKE MODIFICATIONS AND ABELIANISATION.

CONFERENCES AND WORKSHOPS

- | | |
|-----------|---|
| AUG. 2019 | INTRODUCTORY WORKSHOP: "HOLOMORPHIC DIFFERENTIALS IN MATHEMATICS AND PHYSICS", MSRI, BERKELEY. |
| MAY 2019 | WORKSHOP "GEOMETRY AND PHYSICS OF HIGGS BUNDLES", MFO, OBERWOLFACH. |
| FEB. 2019 | WORKSHOP "HOLOMORPHIC DIFFERENTIALS IN MATHEMATICS AND PHYSICS", SIMONS CENTER, STONY BROOK. |
| NOV. 2018 | SCHOOL AND WORKSHOP ON NEW TRENDS IN HIGGS BUNDLE THEORY, ICMAT MADRID. |
| AUG. 2018 | WORKSHOP "GAUGE THEORIES AT INFINITY", SASKATCHEWAN. |
| FEB. 2018 | GEAR WORKSHOP "RELATIVE CHARACTER VARIETIES AND PARABOLIC HIGGS BUNDLES", INDIO. |
| NOV. 2017 | RTG WORKSHOP "THE GEOMETRY AND PHYSICS OF HIGGS BUNDLES II" AND MEETING "CURRENT TRENDS ON SPECTRAL DATA FOR HIGGS BUNDLES III", UNIVERSITY OF ILLINOIS AT CHICAGO. |
| AUG. 2017 | GEAR JUNIOR RETREAT AND GEAR RETREAT, STANFORD UNIVERSITY. |
| FEB. 2017 | CONFERENCE "ASYMPTOTIC GEOMETRY OF GROUPS AND SPACES", HEIDELBERG. |

TEACHING EXPERIENCE

WT 19/20	TEACHING ASSISTANCE "GEOMETRIC GROUP THEORY", UNIVERSITY OF HEIDELBERG.
WT 18/19	TUTOR "DIFFERENTIAL GEOMETRY 2: SYMMETRIC SPACES", UNIVERSITY OF HEIDELBERG.
WT 17/18	TUTOR "DIFFERENTIAL GEOMETRY 2: SYMMETRIC SPACES", UNIVERSITY OF HEIDELBERG.
ST 17	TEACHING ASSISTANCE "THERMODYNAMIC FORMALISM", UNIVERSITY OF HEIDELBERG.
ST 16	TUTOR "GEOMETRY", UNIVERSITY OF STUTTGART.
WT 15/16	TUTOR "ANALYSIS 1", UNIVERSITY OF STUTTGART.
ST 14	TUTOR "LINEAR ALGEBRA AND ANALYTIC GEOMETRY 2", UNIVERSITY OF STUTTGART.
WT 13/14	TUTOR "LINEAR ALGEBRA AND ANALYTIC GEOMETRY 1", UNIVERSITY OF STUTTGART.

(ST: SUMMER TERM, WT: WINTER TERM)