

VORTRÄGE

15:45 Uhr Kaffeejause

Mittwoch, 29. November 2017 16:15 bis 17:15, Sky Lounge, 12. OG, OMP 1

Mathematisches Kolloquium: Douglas Hofstadter (Indiana University): "The Human Story behind the Hofstadter Butterfly"

Org: Karl Sigmund

https://mathematik.univie.ac.at/fileadmin/user_upload/f_mathematik/Vortraege/2017_18/20171129DouglasHofstadter.pdf

Abstract:

From the early 1930s onwards, theoretical physicists strove to understand the behavior of electrons in a crystal when the crystal was placed in a magnetic field. While electrons in a crystal (with no magnetic field) were well understood, and while electrons in a magnetic field (with no crystal) were well understood, combining these two situations yielded a strangely recalcitrant problem, and insights were few and far between. In the mid-1970s, the speaker — at the time a graduate student in physics — was given this problem by his doctoral advisor. He struggled with it for almost a year, and then something marvelous suddenly happened. It turned out that over a decade earlier, as an undergraduate mathematics student, he had explored just the right area of mathematics to allow him to see the essence of what was happening in this physics problem. Thanks to this piece of luck, he discovered a visually riveting new type of quantum mechanical energy spectrum — a graph made out of an infinite number of smaller copies of itself. In the following decades, this graph became well known and acquired the nickname of "Hofstadter butterfly". The lecture will recount the human story of this discovery, a tale rife with emotional twists and turns. In the talk there will be some technical parts, but most of it will be accessible to people with little knowledge of physics; all that is needed is a sense of curiosity about the laws of nature and a sympathy for the idea that beauty must play a key role therein.

Vinum cum pane im Anschluss

Mittwoch, 22. November 2017 09:00 bis Montag, 04. Dezember 2017 16:00, WPI Seminarraum 08.135, OMP 1

WPI-Workshop: Working Group: "MCTDH-X: Many-body physics of interacting atoms in cavities and fermions with spin"

Org: A. Lode (WPI), P. Molignini (ETH-Zürich)

http://www.wpi.ac.at/event_view.php?id_activity=253

Montag, 27. November 2017 09:30 bis Freitag, 01. Dezember 2017 12:30, ESI, Boltzmann Lecture Hall, Boltzmannngasse 9/2, 1090 Wien

ESI Workshop: Woche 1: "Nonlinear Water Waves - an Interdisciplinary Interface"

Org: David Henry (U College Cork), Konstantinos Kalimeris (RICAM, Linz), Emilian Parau (U of East Anglia), Jean-Marc Vanden-Broeck (U College London), Erik Wahlen (Lund U)

<http://www.esi.ac.at/activities/events/2017/nonlinear-water-waves>

Dienstag, 28. November 2017 14:00 bis 15:00, Fakultät für Physik, Erwin Schrödinger-Hörsaal, Boltzmannng. 5, 5. St., 1090 Wien

Seminar für Mathematische Physik: Daniel Fernandez (Iceland U.): "Entanglement entropy at non-equilibrium in holography"

Org: S. Fredenhagen, D. Grumiller

https://mathematik.univie.ac.at/fileadmin/user_upload/f_mathematik/Vortraege/2017_18/Seminareinladung_Mathematik_Fernandez_28Nov2017.pdf

Dienstag, 28. November 2017 15:00 bis 17:00, BZ 9, 9.OG, OMP1

AG Biomathematik: Ulrich Berger (WU Wien): "Reputation and the evolution of trust"

Org: J. Hermisson, R. Bürger

<http://homepage.univie.ac.at/Reinhard.Buerger/AGBio.html>

Dienstag, 28. November 2017 15:00 bis 15:45, HS 2, EG, OMP 1

PDE Afternoon: Tomáš Roubíček (Charles University Prague and Czech Academy of Sciences, Czech Republic): "Dynamical damage and phase-field fracture"

Org: SFB und DK

<https://www.univie.ac.at/sfb65/public/events/?id=4>

Dienstag, 28. November 2017 15:15 bis 16:45, Dissertantenraum, Freihaus, Turm A, 8. OG., Wiedner Hauptstr. 8-10, 1040 Wien

AG Diskrete Mathematik: Nishad Kothari (Univ. Wien): "Pfaffian Orientations and K_4 -free Graphs"

Org: M. Drmota

https://mathematik.univie.ac.at/fileadmin/user_upload/f_mathematik/Vortraege/2017_18/abstract-AG-talk.pdf

Dienstag, 28. November 2017 16:00 bis 16:30, WPI Seminarraum 08.135, OMP 1

PDE Afternoon: Lorenzo Portinale (IST Austria): "Optimal Transportation and Random Matching Problem"

Org: SFB und DK

<https://www.univie.ac.at/sfb65/public/events/?id=4>

Dienstag, 28. November 2017 16:30 bis 17:00, WPI Seminarraum 08.135, OMP 1

PFE Afternoon: Stefano Melchionna (University of Vienna): "Long-time behavior of a nonlocal Cahn-Hilliard equation with reaction"

Org: SFB und DK

<https://www.univie.ac.at/sfb65/public/events/?id=4>

Mittwoch, 29. November 2017 11:30 bis 12:30, HS 11, 2. OG, OMP 1

NuHAG Talks: Dennis Elbrächter (Univ. Wien): "Super-resolution from (Short Time) Fourier Transform Information"

Org: KH. Gröchenig

https://www.univie.ac.at/nuhag-php/program/talks_details.php?id=3402

Mittwoch, 29. November 2017 14:00 bis 15:00, BZ 9, 9.OG, OMP1

öffentliche Defensio: Tomack Gilmore: "Rhombus tilings and electrostatics"

Org: J. Hofbauer, Chr. Krattenthaler, I. Fischer und P. Paule

https://mathematik.univie.ac.at/fileadmin/user_upload/f_mathematik/Vortraege/2017_18/Gilmore.pdf

Donnerstag, 30. November 2017 10:00 bis 11:00, BZ 9, 9.OG, OMP 1

öffentliche Defensio: Anastasiia Zalashko: "Causal optimal transport: theory and applications"

Org: J. Hofbauer, W. Schachermayer, A. Pichler u. St. Gerhard

https://mathematik.univie.ac.at/fileadmin/user_upload/f_mathematik/Vortraege/2017_18/Zalashko.pdf

Donnerstag, 30. November 2017 15:15 bis 17:00, BZ 9, 9.OG, OMP1

AG Ergodentheorie: Homero Canales (UNAM Mexico): "Discrete Dynamical Systems - a survey in transitivity"

Org: H. Bruin, R. Zweimüller

<http://mat.univie.ac.at/~zweimueller/abstract-talk-30Nov.pdf>

Donnerstag, 30. November 2017 16:00 bis 17:00, KGRC, lecture room, Währinger Str. 25, 1090 Wien

KGRC Seminar: Maxwell Levine (KGRC): "Forcing Square Sequences"

Org: KGRC

http://www.logic.univie.ac.at/2017/Talk_11-30_a.html

Donnerstag, 30. November 2017 16:30 bis 18:00, SR 11, 2.OG, OMP 1

Vienna Seminar in Mathematical Finance and Probability: Julio Backhoff (TU Wien): "Martingale Benamou-Brenier: a probabilistic perspective"

<https://fam.tuwien.ac.at/events/vs-mfp/>