

VORTRÄGE

15:45 Uhr Kaffeejause

Mittwoch, 13. Juni 2018 16:15 bis 17:15, Sky Lounge, 12. OG, OMP 1

Mathematisches Kolloquium: Arnold Neumaier (Universität Wien): "The mathematics of animal breeding values"

Org: Fakultät für Mathematik, Dekan Christian Krattenthaler

***Abstract:** Successful animal breeding is one of the pillars of modern agriculture. In the past, the selection of animals for reproduction was done based on pedigree records over many generations, containing the genealogy of thousands or even millions of animals together with data on their economic cost and value. From these data, characteristic breeding values are *derived* that estimate the value of the current generation of breeding animals for generating productive offspring. This is done using mixed models, linear statistical models for estimating fixed and random effects explaining the data available by means of relations derived from Mendelian genetics. Given such a model, the best linear unbiased prediction (BLUP) of the performance indices modeled can be computed by solving a linear system of equations. In particular, this gives the desired breeding values. The parameters in these models (e.g., heritabilities) are generally unknown initially. They are estimated using a nonlinear optimization procedure called restricted maximum likelihood (REML). In the last decade, the collection of new information in the form of genetic marker data has become economically viable. This gives direct access to part of the genomic information of the animals, and hence an improved means of estimating the properties of potential offspring. The present lecture discusses mixed model equations, the efficient implementation of the REML procedure, and recent techniques for incorporating the additional genomic information into the models. (This is joint work with Prof. Eildert Groeneveld, Bundesforschungsanstalt f. Landwirtschaft, Neustadt, Germany.)*

Vinum cum pane im Anschluss

Montag, 11. Juni 2018 09:00 bis Freitag, 15. Juni 2018 16:00, ESI, Boltzmann Lecture Hall, Boltzmannngasse 9/2, 1090 Wien

Workshop: Numerical Analysis of Complex PDE Models in the Sciences: "Interplay of tensor structured formats with advanced PDE discretizations; session on Signal processing techniques and directionals adapted"

Org: P. Grohs (Univ. Wien), C. Schwab (ETH Zürich)

https://mathematik.univie.ac.at/fileadmin/user_upload/f_mathematik/Vortraege/2017_18/PSH_Workshop1.pdf

Montag, 11. Juni 2018 14:00 bis Mittwoch, 13. Juni 2018 17:30, SR Zemanek, TU Wien, Favoritenstr. 9-11, 1040 Wien

Workshop: "Deontic Resoning: From Ancient Texts to Artificial Intelligence"

Org: A. Ciabattoni (WPI, TU Wien),

https://mimamsa.logic.at/atai/?page_id=22

Dienstag, 12. Juni 2018 09:45 bis 11:15, SR 12, 2. OG, OMP 1

Complex Analysis SE: Giuseppe della Sala (American university of Beirut): "Extremal and stational discs for the Kobayashi k-metric"

Org: M. Reiter, B. Lamel

<http://complex.univie.ac.at/>

Dienstag, 12. Juni 2018 13:45 bis 14:45, TU Wien, Freihaus, SEM 136, 10. Stk., Wiedner Hauptstr. 8-10, 1040 Wien

SE Mathematische Physik: V. Govindarajan (Chennai, Indien): "Should photon mass be zero"

Org: S. Fredenhagen, D. Grumiller

https://mathematik.univie.ac.at/fileadmin/user_upload/f_mathematik/Vortraege/2017_18/SEminareinladung_Mathem_Govindarajan_12Juni2018.pdf

Dienstag, 12. Juni 2018 15:00 bis 17:00, BZ 9, 9.OG, OMP1

AG Biomathematik: Jelena Petrovic (Univ. Wien): "The ancestral recombinational graph"

Org: J. Hermisson, R. Bürger

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

Dienstag, 12. Juni 2018 15:00 bis 17:00, SR 10, 2. OG., OMP 1

Geometry and Analysis on Groups Research SE: Justin Moore (Cornell Univ.): "Subgroups of Thompson's group"

Org: G. Arzhantseva, Ch. Cashen

<http://www.mat.univie.ac.at/~gagt/abstracts/180612.html>

Dienstag, 12. Juni 2018 15:15 bis 16:45, Dissertantenraum, Freihaus, Turm A, 8. OG., Wiedner Hauptstr. 8-10, 1040 Wien

AG Diskrete Mathematik: Judith Braunsteiner: "A Sundaram type bijection for $SO(2k+1)$: vacillating tableaux and pairs of standard Young tableaux and orthogonal Littlewood-Richardson tableaux"

Org: Ch. Krattenthaler

<http://dmg.tuwien.ac.at/nfn/agdm.html>

Dienstag, 12. Juni 2018 16:15 bis 17:00, Fakultät für Physik, Erwin Schrödinger-Hörsaal, Boltzmannng. 5, 5. St., 1090 Wien

Teilchenphysik SE: Bahman Dehnadi (Univ. Siegen): "Automated calculation of N-jet soft functions"

Org: A. Hoang, H. Neufeld

https://mathematik.univie.ac.at/fileadmin/user_upload/f_mathematik/Vortraege/2017_18/SeminareinladungTeilchen_Dehnadi_12Juni2018.pdf

Mittwoch, 13. Juni 2018 11:00 bis 13:00, SR 10, 2. OG., OMP 1

NuHAG SE: Karlheinz Gröchenig (Univ. Wien): "On the zeros of the Wigner distribution"

Org: KH. Gröchenig

http://www.univie.ac.at/nuhag-php/program/talks_details.php?id=3458

Mittwoch, 13. Juni 2018 11:30 bis 13:00, BZ 2, 2. OG., OMP 1

Seminar AG Algebraische Geometrie: Roi Docampo (Univ. of Oklahoma): "Differentials on the arc space"

Org: H. Hauser

Donnerstag, 14. Juni 2018 16:00 bis 18:00, KGRC, lecture room, Währinger Str. 25, 1090 Wien

KGRC SE: Zoltán Vidnyánszky (KGRC): "Borel chromatic numbers: basis and antibasis results"

Org: KGRC

http://www.logic.univie.ac.at/2018/Talk_06-14_a.html

Donnerstag, 14. Juni 2018 16:30 bis 18:00, Seminarraum DC Roter Bereich, 7. OG, TU Wien, Freihaus, Wiedner Hauptstraße 8, 1040 Wien

Vienna SE in Mathematical Finance and Probability: Stephan Eckstein (Univ. of Konstanz, DE): "Superhedging and distributionally robust optimization with Neutral Networks"

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

Freitag, 15. Juni 2018 14:00 bis 15:00, SR 4, 1 OG., OMP 1

öffentliche Defensio: Melanie Graf: "Singularity theorems and rigidity in Lorentzian geometry"

Org: J. Hofbauer, (Univ. Wien), M. Kunzinger, (Univ. Wien), P. T. Chrusciel (Univ. Wine), J. M.M. Senovilla (Univ. Wien),

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