

Seminář se koná v 13.00 v seminární místnosti M5 Ústavu matematiky a statistiky, Brno, Kotlářská 2, Pav.8, přízemí.

Vedoucí semináře: prof. RNDr. Jiří Rosický, DrSc.

Aktuální seznam přednášek naleznete [ZDE](#)

Přednášky v podzimním semestru 2019:

- 12.12.2019
J. Bourke
Two-dimensional limit theories, their models and homomorphisms
- 28.11.2019
J. R. Gonzales
Grothendieck categories and their tensor product as filtered colimits
- 14.11.2019
R. Stenzel
From Univalence to descent via "split indexed quasi-categories" III
- 7.11.2019
T. Uemura
A General Framework for the Semantics of Type Theory
- 30.10.2019
E. Lanari
Cartesian fibrations of $(\infty, 2)$ -categories

- 24.10.2019
R. Stenzel
From Univalence to descent via "split indexed quasi-categories" II

- 17.10.2019
Ch. Walker
Constructions of Kleisli type and unary fibrational structure, with applications to polynomials

- I

- 10.10.2019
J. Adamek
Finitary functors

- 3.10.2019
P. Arndt
Ranges of functors and geometric elementary classes

- 26.9.2019
R. Stenzel
From Univalence to descent via "split indexed quasi-categories" I

- 19.9.2019
J. Adamek
Ultrafilters in Locally Presentable Categories

Přednášky v jarním semestru 2019:

- 6.6.2019
S. Henry
The language of a model category

- 30.5.2019
M. Lieberman
Cofibrant generation and stable independence

- 9.5.2019
E. Lanari

Simplicial models for $(\infty, 2)$ -categories

- 18.4.2019
L. Positselski
Agreeable and topologically agreeable abelian categories
- 21.3.2019
S. Henry
Left, right and weak model categories
- 14.3.2019
J. Bourke
Homotopical cocompleteness of enriched categories II
- 7.3.2019
J. Bourke
Homotopical cocompleteness of enriched categories I
- 21.2.2019
H. Gindi
Cartesian-Enriched Quasi-categories, the Isofibration theorem, and Yoneda's lemma
- 31.1.2019 (extended seminar in M6) 10:30-11:30: G. Lack, TBA
13:00-14:00: J.Adamek, Reterman's theorem for monads
- 24.1.2019 G.Lo Monaco
On two extensions of the notion of ∞ -topos

Přednášky v podzimním semestru 2018:

- 13.12.2018 S.Vasey
An introduction to forking independence
- 11.12.2018 (an additional talk in MS1, 12:30) B.Chorny
Homotopy theory of homotopy presheaves

- 6.12.2018 L.Positselski
Semisimple abelian categories and topologically semisimple topological rings

- 22.11.2018 S.Henry
The "Scott topos construction", and non-geometric abstract elementary classes

- 8.11.2018 J.Obradovic
Categorified cyclic operads in nature

- 25.10.2018 S.Henry
Transfinite constructions in infinity categories

- 11.10.2018 A.Tokarcik
A report on van der Berg's paper "Path categories and propositional identity types"

- 20.9.2018 C.Espindola
Omitting types theorem, conceptual completeness and definability for infinitary logic

Přednášky v jarním semestru 2018:

- 24.5.2018 C.Espindola
The descent theorem for infinitary pretoposes

- 22.5.2018, 10:00 J.Stovicek
t-Structures in the context of Grothendieck derivators

- 17.5.2018 M.Lieberman
Nonforking for the rest of us

- 10.5.2018 I.Di Liberti

Accessibility and presentability in 2-categories

- 19.4.2018 L.Positselski

Reductions of Quillen exact categories and Bockstein sequences

- 12.4.2018 M.Karvonen

Monads on dagger categories

- 15.3.2018 I.Di Liberti

Structural vs material set theories

- 8.3.2018 J.Rosicky

Free completions of categories

- 22.2.2018 W.Kubis

The weak amalgamation property

- 15.2.2018 C.Espindola

A categorical approach to heterogeneous quantifiers and completeness for game semantics

- 8.2.2018 J.Bourke

Algebraic chains and pointed endofunctors

- 25.1.2018

A. Brooke-Taylor Locating spectra of in the Bousfield lattice

Přednášky v podzimním semestru 2017:

- 14.12.2017 F.Loregian

2-categorical aspects of derivator theory

- 7.12.2017 C.Espindola

Topological reconstruction results

- 30.11.2017 I.Di Liberti

Remarks on universal abstract elementary classes

- 23.11.2017 M.Filakovsky

Computing simplicial representatives of homotopy group elements

- 9.11.2017 C.Espindola

Stone duality for infinitary first order logic

- 2.11.2017 M.Lieberman

Internal size and cardinality

- 26.10.2017 L.Positselski

Perpendicular subcategories in module categories

- 19.10.2017 S.Henry

On Simpson's conjecture

- 5.10.2017 X.Zhang

On injective hulls of ordered algebras

- 21.9.2017 P.Patak

Almost-embeddings and related topics

Přednášky v jarním semestru 2017:

- 22.6.2017 L.Vokrinek

Universal property of bar construction and homotopy modules

- 15.6.2017 J.Bourke

Nervous monads and their associated theories

- 8.6.2017 M.Ferov

Groups, machines, algae and trees

- 1.6.2017 S.Virili

Factorization systems on (stable) derivators

- 13.4.2017 D.Kruml

Categories for mass production

- 23.3.2017 O.Raventos

Generalized nerve and model structures for the homotopy theory of enriched homotopy theories

- 16.3.2017 S.Vasey

Independence and categoricity in universal classes

- 2.3.2017 S.Henry

New algebraic model for homotopy types and higher structures

Přednášky v podzimním semestru 2016:

- 8.12.2016 F.Loregian
t-structures on stable (infty,1)-categories

- 1.12.2016 L.Positselski
Categorical tilt, contra-module categories, and closed functors

- 10.11.2016 W.Kubis
Weak Fraisse limits

- 3.11.2016 M.Weber
Vines and internal algebras

- 27.10.2016 A.Kuber
Definable categories

- 20.10.2016 T.Beke
Grothendieck (semi)rings of categories arising in geometry

- Thursdays, M3, 16:00-17:50
T.Beke: Geometric applications of model theory (series of lectures)
The first lecture: 29.9.2016

Přednášky v jarním semestru 2016:

- 16.6.2016 W.Kubis: Generic objects
J.Rosicky: Approximate injectivity
P.Zambrano: Around discrete and metric abstract elementary classes

- 2.6.2016 J.Bourke
Iterated injectivity and higher grupoids

- 19.5.2016 M.Makkai
Conjectures concerning Batanin's definition of "weak omega category"

- 14.4.2016 A.Kuber
Grothendieck rings of model theoretic structures

- 7.4.2016 G.Bohm

A categorical approach to multiplier bialgebras

- 25.2.2016 M.Weber

Algebraic Kan extensions in operad theory

- 28.1.2016, the room M6 J.Bourke

The construction of globular infinity-grupoids types, Kan complex etc.

Přednášky v podzimním semestru 2015:

- 19.11. 2015 M.Ferov

Conjugacy separability in graph products of groups

- 5.11. 2015 M.Burke

Synthetic Lie theory III

- 29.10. 2015 M.Burke

Synthetic Lie theory II

- 22.10. 2015 L.Positselski

Very flat modules, contraadjusted modules and contramodules III

- 15.10. 2015 W.Kubis
Universal homogeneous objects

- 8.10. 2015 L.Positselski
Very flat modules, contraadjusted modules, and contramodules II.

- 1.10. 2015 L.Positselski
Very flat modules, contraadjusted modules, and contramodules I.

- 24.9. 2015 L.Buhne
Strictification of trihomomorphisms

Přednášky v jarním semestru 2015:

- 21.7. 2015
J.Baldwin
Locally finite AECs

- 14.5. 2015
W.Boney Large Cardinal Axioms from Tameness in AECs

- 26. 3. 2015
I. Herzog Finitely accesible additive categories

- 12. 3. 2015
U. Schreiber
The (co-)reflective categories of supergravity

- 5. 3. 2015
J. Paseka Algebraic methods in quantum and other logics

Přednášky v podzimním semestru 2014:

- 11. 12. 2014
J. Rosicky
Accesible weak factorization systems

- 27. 11. 2014
M. Lieberman
An alternative to Shelah's Presentation Theorem

Přednášky v jarním semestru 2014:

- 2. 6. 2014 (Monday) , 13-15, M5
- 3. 6. 2014 (Tuesday) , 13-15, M6
- 4. 6. 2014 (Wednesday) , 10-12, M6
Adam van Roosmalen
Derived categories (series of lectures)

- 15. 5. 2014
John Bourke
Some thoughts on Makkai's generalised sketches and enriched weakness

- 17. 4. 2014
Alex Stanculescu
Stacks and sheaves of categories as fibrant objects

- 3. 4. 2014
Jiří Rosický
Generalizing Makkai-Pitts theorem

- 20. 3. 2014
Leonid Positselski,

Derived categories of the second kind

- 6. 3. 2014
Ilias Amrani,
Rational homotopy theory of function spaces

- 20. 2. 2014
Oriol Raventós,
Homotopical properties of the hammock localization

Přednášky v podzimním semestru 2013:

- 30. 1. 2014
Carles Casacuberta
Cellular motivic spectra are localizing and colocalizing

- 9. 1. 2014
John Bourke
What are accessible algebraic weak factorisation systems generated by? (Final part)

- 28. 11. 2013
Ilias Amrani
Homotopy comparison between commutative and associative DGA

- 14. 11. 2013
Lukáš Vokřínek
When are pushouts of categories homotopy pushouts?

- 31. 10. 2013
G. Raptis
A survey of derivator K-theory

- 24. 10. 2013
S. Lack
The Catalan simplicial set

- 17. 10. 2013
Jiří Rosický
Towards categorical model theory

- 3. 10. 2013
Lukáš Vokřínek
Heaps and unpointed stable homotopy theory

- 26. 9. 2013
John Bourke
Relating to small generation of algebraic weak factorisation systems

- 12. 9. 2013
Pedro Guil Asensio
Ideal Approximation Theory

Přednášky v jarním semestru 2013:

- 20. 6. 2013
Dany Majard
Towards a classification of double groups

- 13. 6. 2013
Jiří Rosický
Algebraic approach to (super)geometry

- 30. 5. 2013
Victor Harnik
Deriving the Lorenz transformation

- 16. 5. 2013
Tibor Beke
The Grothendieck (semi)ring of the category of semi-algebraic sets

- 2. 5. 2013
Jiří Velebil
Quasivarieties and varieties of ordered algebras

- 25. 4. 2013
Klaus Bering
Algebraic aspects of supergeometry, IV.

- 11. 4. 2013
Klaus Bering
Algebraic aspects of supergeometry, III.

- 4. 4. 2013
Nick Gurski

Stable Homotopy Hypothesis

- 28. 3. 2013
Rikard von Unge
Algebraical aspects of supergeometry II

- 21. 3. 2013
Rikard von Unge
Algebraical aspects of supergeometry

- 7. 3. 2013
Fernando Muro
Homotopy theory of enriched categories

- 28. 2. 2013
Free session, discussion about connections of category theory and physics

- 21. 2. 2013
Oriol Raventos
Properties of algebraic objects up to homotopy

- 14. 2. 2013
Lukáš Vokřínek
Chain complexes of R-modules up to homotopy

Přednášky v podzimním semestru 2012:

- 7. 2. 2013
Jiří Rosický
Limits of combinatorial model categories

- 31. 1. 2013
Dion Coumans
Canonical extension and the topos of types

- 24. 1. 2013
Dany Majard
What weak internalizations lead to

- 13. 12. 2012
Jeffrey Morton
2-Group Actions on Categories and Higher Gauge Theory

- 6. 12. 2012
John Bourke
Lifting natural weak factorisation systems
(joint work with Nick Gurski)

- 29. 11. 2012
Tibor Beke
A functorial version of Shelah's Singular Compactness Theorem

- 22. 11. 2012
Lukas Vokrinek
Computing homotopy classes of maps

- 15. 11. 2012
Michael Makkai
Enrichment over a closed multicategory, applied to semistrict higher categories

- 9. 11. 2012
Tibor Beke
The sign pattern theorem

- 1. 11. 2012
Michael Makkai
Enrichment over a closed multicategory, with applications to semistrict higher categories

- 25. 10. 2012
Michael Lieberman
A Crash Course in Abstract Model Theory II

- 11. 10. 2012
Michael Lieberman
A Crash Course in Abstract Model Theory

- 4. 10. 2012
George Raptis
The moduli space of topological realizations of an unstable coalgebra

Přednášky v jarním semestru 2012:

- 23. 6. 2012

Oriól Raventós
Seminar about stacks II

- 7. 6. 2012

Oriól Raventós
Seminar about stacks I

- 31.5. 2012

Lukáš Vokřínek
Spectra

- 3. 5. 2012

Lukáš Vokřínek
Univalence axiom for simplicial sets

- 19. 4. 2012

Ilias Amrani
A model for infinity groupoids

- 5. 4. 2012

Lukáš Vokřínek
Homothopy isomorphisms

- 29. 3. 2012

Thorsten Palm
Polytopic Sets and Categories with Slicing

- 22. 3. 2012

Jiří Rosický
Rigidification of algebras over essentially algebraic theories

- 15. 3. 2012

Richard Garner
Lex colimits

- 8. 3. 2012

John Bourke
A 2-dimensional monadicity theorem, Part 2

Přednášky v podzimním semestru 2011:

- 3. 10. 2011

Ilias Amrani, MU Brno
K-theory of Waldhausen categories

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10. 10. 2011

Georgios Raptis, Univerzita Osnabrück
Introduction to derivators and derivator K-theory

- 17. 10. 2011

Jiří Rosický, MU Brno
Around generalized Brown representability

- 31. 10. 2011

Marek Zawadowski, Univerzita Varšava
CoMalcev monads in lax monoidal fibrations

Stanislaw Szawiel, Univerzita Varšava
The three tensors theorem and opetopic sets

- 7. 11. 2011

Jan Pavlík, VUT Brno
Kan extensions in context of concreteness

- 14. 11. 2011

Lukáš Vokřínek, MU Brno
Decompositions of homotopy colimits

- 21. 11. 2011

John Bourke, MU Brno
A 2-dimensional monadicity theorem

- 28. 11. 2011

Martin Markl, MÚ AVČR
What do the Hochschild cohomology and DG categories have in common?

- 5. 12. 2011

Michael Makkai, MU Brno
Homotopies in face structures, with an application to simplicial sets

- 12. 12. 2011

Ilias Amrani
Closed symmetric monoidal structure on the homotopy category of dg-categories after
B.Toën

- 12. 1. 2012

Oriol Raventós
A construction of the stable motivic homotopy category

- 23. 1. 2012

John Bourke

Understanding Garner's version of Quillen's small object argument

Přednášky v jarním semestru 2011:

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12. 5. 2011

Victor Harnik, University of Haifa,
Category theoretical aspects of Craig's interpolation theorem

- 19. 5. 2011

Michael Makkai, MU Brno,
Shape categories and explicit monads

- 26. 5. 2011

Michael Makkai, MU Brno
Two examples for using a global point of view to achieve concrete results.

- 2. 6. 2011

John Bourke, MU Brno

Codescent objects, higher kernels and cateads in Cat and 2-categories of categories with algebraic structure

- 9. 6. 2011

Lukáš Vokřínek, MU Brno

Constructing a cofibration structure on V-Cat

- 16. 6. 2011

Dmitri Chikhladze, MU Brno

Algebras, monads and fibre functors

- 23. 6. 2011

Jiří Rosický, MU Brno

Thoughts about the paper G. Garkusha, Homotopy theory of associative rings

- 29. 6. 2011

Miroslav Korbelař, MU Brno

Commutative semirings - simple and additively divisible