

	Sem 1
Analyse 1	Monod
Alg Lin 1	Michel
Structures algè	Patakfalvi

	Sem 2
Analyse 2	Nobile
Alg Lin 2	Eisenbrand
Discrete Math	Viazovska (English)

	Sem 3
Analyse 3	Hongler
Théorie des groupes	Hess
Probabilité	Aru (English)
Discrete math	Dostert
Metric spaces and top	Aru (English)

	Sem 4
Analyse 4	Colombo
Anneau et corps	Patakfalvi
Statistiques	Panaretos
Numerical Analysis	Kressner
Discr. optimisation	Marcus
Topologie	Scherer

Algebra and geometry		
		<i>Remarks</i>
Troyanov	Chapitres choisis de géométrie	BA5
Kiesenhofer	Introduction to differential manifolds	
post-doc Michel	Intro à la théorie analytique des nombres	<i>in English</i>
Patakfalvi	Rings and modules	
Gerber Thomas	Théorie de Galois	<i>en français</i>
Testerman	Algèbres de Lie	<i>en français</i>
Lachowska	Representation theory	BA6
Urech	Topologie algébrique	<i>in English</i>
Michel	Algebraic number theory	
Wyss	Algebraic curves	
Monod	Analysis on groups	MA1
Hess	Homotopical algebra	<i>alternating with Algebra K-theory</i>
Michel	Topics in number theory	
Svaldi	Complex manifolds	<i>pas donné en 2020-21</i>
Patakfalvi	Modern algebraic geometry	
De Courcy Matthe	Riemann surfaces	
Troyanov	Introduction à la Géométrie Riemannienne	MA2
vacat (P.doc ZP or	Topics in algebraic geometry	
Wyss	P-adic Numbers and applications	
Testerman	Repr. th. of semisimple Lie algebras	
Urech	Lie groups Linear algebraic groups	
Viazovska	Modular forms and applications	

Algorithmic and Discrete Math		
		<i>Remarks</i>
Riccardo Maffucci	Graph theory	BA5
		<i>Several courses from CS</i>
Boumal	Nonlinear optimization	BA6
Marcus	Probabilistic methods in combinatorics	MA1
Bierlaire	Mathematical modeling of behavior	
Abbé	Combinatorial statistics	
Eisenbrand	Integer optimization	MA2
Boumal	Optimization on manifolds	

Analysis		
		<i>Remarks</i>
Buffoni	Analyse fonctionnelle 1	BA5
Krieger	Equations differentielles ordinaires	
Stubbe	Mesure et intégration	<i>in French</i>
Nobile	Introduction to partial differential equations	
Ruf	Topics in complex analysis	
Vela	Dynamics and Bifurcations	BA6
Buffoni	Equations aux dérivées partielles d'évolution	<i>in French - BA6 au lieu de MA1</i>
Hongler	Lattice models	MA1
Monod	Analysis on groups	
Maddocks	Differential geometry of framed curves	
Radici	Distribution and interpolation spaces	
Krieger	Harmonic analysis	MA2
Stra	Calculus of Variation	
Colombo	Optimal transport	
Widmayer	Dispersive PDEs	
Maddocks	Mathematical modeling of DNA	
Nguyen	Inequalities and trace theory for Sobolev spaces	<i>Seminar, seminar course 4h/w +2+2 = 10ECTS</i>
Ruf	Analyse fonctionnelle 2	<i>finalement MA2 et pas BA6</i>

	Numerical Analysis	
		<i>Remarks</i>
Stubbe	Mesure et intégration	BA5
Nobile	Introduction to partial differential equations	
Picasso	Advanced numerical analysis	
Bufa	Numerical approximation of PDEs	BA6
Abdulle	Numerical integration of dynamical systems	
		MA1
Pulido and ..	Computational Finance	<i>pas dans MA charges 2020-2021</i>
Nobile	Stochastic simulation	
Kressner	Low rank approximation techniques	
Hesthaven	Numerical methods for conservation laws	
Abdulle	Numerical integration of stochastic DEs	MA2
Bufa	Numerics for fluids, structures & electromagnetics	
Kressner	Computational linear algebra	

	Probability	
		<i>Remarks</i>
Stubbe	Mesure et intégration	BA5
Mountford	Stochastic processes	BA6
Dalang	Martingales et mouvement Brownien	<i>in French</i>
Junnila	Probability theory	MA1
Dalang	Théorie du calcul stochastique	
Pulido and ..	Computational Finance	<i>pas dans MA charges 2020-2021</i>
Hongler	Lattice models	
Abbé	Combinatorial statistics	
Nobile	Stochastic simulation	
Aru	Gaussian processes	MA2
Schmutz	Martingales in financial math	
Abdulle	Numerical integration of stochastic DEs	
Friedli	Statistical mechanics and Gibbs measure	

	Statistics	
		<i>Remarks</i>
Panaretos	Linear models	BA5
Mountford	Stochastic processes	BA6
Olhede	Time series	
Stensrud	Randomization and causation	
Koch	Statistical theory	MA1
Junnila	Probability theory	
Obozinski	Statistical machine learning	
Davison	Risk, rare events and extremes	
Goldstein	Applied biostatistics	MA2
	Bayesian computation	
Goldstein	Statistics for genomic data analysis	
Koch	Multivariate statistics	
Stensrud	Biostatistics	
Olhede	Statistical analysis of network data	
Davison	Modern regression methods	

	Other courses	<i>Remarks</i>
Duparc	Logique mathématique	BA5
		BA6
Duparc	Gödel and recursivity	MA1
Duparc	Set theory	MA2