

Florian Enescu

PAPERS

Algebra:

- New estimates for Hilbert-Kunz multiplicities for local rings of fixed dimension, I. M. Aberbach and F. Enescu, preprint 2010, submitted for publication
- A finiteness condition on local cohomology in positive characteristic, F. Enescu, preprint 2010, submitted for publication
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- Local cohomology and F-stability, **Journal of Algebra** 322 (2009) no. 2 3063–3077 (special issue dedicated to Paul C. Roberts)
- Frobenius structure of local cohomology, F. Enescu and M. Hochster, **Algebra and Number Theory** 2 (2008) no 7, 721--754
- Lower bounds for Hilbert-Kunz multiplicities for local rings of fixed dimension, I. M. Aberbach and F. Enescu, **Michigan Math. Journal** volume 57 (2008) 1--16 (special issue in the honor of M. Hochster).
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- Asymptotic growth of powers of ideals, joint work with C. Ciupercă, Sandra Spiroff, **Illinois Jour. Math** (special issue dedicated to P. Griffith), 51 (2007), no. 1, 29--39 (electronic)
- When does the F-signature exist?, joint work with I. M. Aberbach, **Annales Math. de Toulouse**, 15, 2 (2006) 195--201
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- F-injective rings and F-stable primes, **Proceedings of the Amer. Math. Soc.**, 131 (2003), 3379--3386
- Strong test modules and multiplier ideal, **manuscripta mathematica**, vol. 111, (4) 2003, 487--498
- On the behavior of F-rational rings via flat base change, **Journal of Algebra** (November 2000), 232, no. 2, 543--566
- Infinitesimal module deformations in the Thom-Sebastiani problem, joint work with D. Popescu and G. Pfister, **Arch. Math. (Basel)**, (69) 1997, no. 3, 196--208

Applications of algebra to circuit design:

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- Equivalence Verification of Polynomial Datapaths using Ideal Membership Testing, Namrata Shekhar, Priyank Kalla, Florian Enescu, **IEEE Trans. on CAD**, Volume 26, Issue 7, July 2007 1320 - 1333

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- Finding linear building-blocks for RTL synthesis of polynomial datapaths with fixed-size bit-vectors, joint work with Sivaram Gopalakrishnan, Priyank Kalla, M. Brandon Meredith, Florian Enescu **Computer-Aided Design, 2007. ICCAD 2007. IEEE/ACM International Conference on 4-8 Nov. 2007** Page(s):143 - 148
- Optimization of Arithmetic Datapaths with Finite Word-Length Operands, joint work with Sivaram Gopalakrishnan, Priyank Kalla, Florian Enescu, **Asia/South-Pacific DAC, ASP-DAC (2007)**.
- Simulation Bounds for Equivalence Verification of Arithmetic Datapaths with Finite Word-Length Operands, Namrata Shekhar, Priyank Kalla, M Brandon Meredith, Florian Enescu, **Formal Methods in Computer-Aided Design, FMCAD - 2006**.

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- Equivalence Verification of Arithmetic Datapaths with Multiple Word-Length Operands, Namrata Shekhar, Priyank Kalla, Florian Enescu, **Proceedings of the Design Automation and Test in Europe (DATE) Conf.**, March 2006.
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- Exploiting vanishing polynomials for equivalence verification of fixed-size arithmetic datapaths, Namrata Shekhar, Priyank Kalla, Florian Enescu and Sivaram Gopalakrishnan. **Proceedings of the Intl. Conf. on Computer Design ICCD**, Oct. 2005.

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