

Publications and Preprints of Kiumars Kaveh

March 1, 2010

Articles:

- Kaveh, K. *String polytopes as Newton-Okounkov bodies for flag and spherical varieties*. (March 2010). To be submitted to *Inventiones Mathematicae*. (March 2010, 17 pages).
- Kaveh, K.; Khovanskii, A. G. *Moment polytopes, semigroup of representations and Kazarnovskii's theorem*. arXiv:1003.0245. Submitted to *Smale Festschrift Vol VII, J. of fixed point theory and applications*. (February 2010, 16 pages).
- Kaveh, K. *A remark on asymptotic of highest weights in tensor powers of a representation*. arXiv:1002.1984. To be submitted to *J. of Lie theory*. (February 2010, 7 pages).
- Kaveh, K.; Khovanskii, A. G. *Convex bodies associated to actions of reductive groups*. arXiv:1001.4830 . To be submitted to *Transformation Groups*. (January 2010, 47 pages).
- Kaveh, K.; Khovanskii, A. G. *Newton-Okounkov bodies, semigroups of integral points, graded algebras and intersection theory*. arXiv:0904.3350. Submitted to *Annals of Mathematics*. (November 2009, 44 pages).
- Kaveh, K.; Khovanskii, A.G. *Algebraic equations and convex bodies*. (2009). arXiv:0812.4688. To appear in *Perspectives in Analysis, Topology and Geometry*, Birkhäuser series Progress in Mathematics (in honor of Oleg Viro). (16 pages).
- Kaveh, K.; Khovanskii, A. G. *Mixed volume and an analogue of intersection theory of divisors for non-complete varieties*. (2009). arXiv:0812.0433. To appear in *Moscow Mathematical Journal*. (34 pages).
- Carrell, J. B.; Kaveh, K. *On the equivariant cohomology of subvarieties of a \mathfrak{B} -regular variety*. *Transformation Groups* 13 (2008), no. 3-4, 495–505 (Volume in honor of Bertram Kostant).
- Kaveh, K.; Khovanskii, A. G. *Convex bodies and algebraic equations on affine varieties*. (2008). arXiv:0804.4095. (44 pages).
- Kaveh, K. *Note on cohomology rings of spherical varieties and volume polynomial*. (2008). arXiv:0312503. To be submitted to *Moscow Mathematical Journal* (17 pages).
- Carrell, J. B.; Kaveh, K.; Puppe, V. *Vector fields, torus actions and equivariant cohomology*. *Pacific Journal of Mathematics*, Vol. 232 (2007), No. 1, 61–76.
- Kaveh, K. *SAGBI bases and degeneration of spherical varieties to toric varieties*, *Michigan Math. J.* 53 (2005), No. 1, 109–121.
- Kaveh, K. *Vector fields and cohomology rings of toric varieties*, *Canadian Math. Bull.* 48 (2005), No. 3, 414–427.

- Guyot, C.; Kaveh, K.; Patankar, V. *Efficient algorithm for the arithmetic on the hyperelliptic Jacobians of genus 3*. *Journal of Ramanujan Mathematical Society*, 19 (2004), No. 2, 119–159.
- Kaveh, K. *Morse theory and Euler characteristic of sections of spherical varieties*. *Transformation Groups*, Vol. 9 (2003), No. 1, 47–63.

Work in progress:

- *Genus of complete intersections in flag varieties and spherical varieties*. With A. G. Khovanskii.
- *On cohomology of varieties with a \mathfrak{B} -action*. With J. B. Carrell and J. Kuttler.

Other preprints:

- Kaveh, K.; Love, P. *Random sampling of quantum operations*. D-wave systems. (June 2005).
- Kaveh, K.; Love, P. *Parametrization of quantum operations*. D-wave systems. (August 2005).