## Workshop on Mathematics Related to Arrangements of Hyperplanes

## Tokyo Metropolitan University, July 13-18, 1998 (at TMU International House)

In honor of the  $60^{th}$  birthyear of Peter Orlik

July 13 (Mon)

9:40-10:30 **Peter Orlik** (Wisconsin) Arrangements and hypergeometric integrals (1)

10:45-11:45 **Kyoji Saito** (RIMS) The polyhedron dual to the Coxeter arrangements

13:30-14:30 Luis Paris (Bourgogne) Intersection subgroups of complex hyperplane arrangements

14:45-15:45 Eriko Hironaka (Florida State) Boundary manifolds of line arrangements

16:00-17:00 **Daniel C. Cohen** (Louisiana State) Cohomology of fiber-type arrangements and Orlik-Solomon algebras

July 14 (Tue)

9:40-10:30 **Peter Orlik** (Wisconsin) Arrangements and hypergeometric integrals (2)

10:45-11:45 **Hiroaki Terao** (Tokyo Metropolitan) Antiinvariant differential forms and logarithmic forms of Coxeter arrangements (with Louis Solomon)

13:30-14:30 **Bernard Teissier** (Ecole Normale Sup.) Multiscale curvature concentration in Milnor fibers

14:45-15:45 Masaaki Yoshida (Kyushu) Intersection numbers of twisted (co)cycles

16:00-17:00 Christos Athanasiadis (U. Penn.) Deformations of Coxeter arrangements and their characteristic polynomials

19:15-20:00 **Stefan Papadima** (Romanian Acad. Math. Inst.) Milnor fibers of arrangements

20:15-21:00 Herbert Kanarek (UNAM) Gauss-Manin connections of arrangements

July 15 (Wed)

9:40-10:30 **Peter Orlik** (Wisconsin) Arrangements and hypergeometric integrals (3)

10:45-11:45 **Richard Stanley** (MIT) The distance enumerator of a hyperplane arrangement

July 16 (Thu)

9:40-10:30 **Peter Orlik** (Wisconsin) Arrangements and hypergeometric integrals (4)

10:45-11:45 **Kazuhiko Aomoto** (Nagoya) Picard-Lefschetz transformation for quasi-hypergeometric functions

13:30-14:30 Alex Suciu (Northeastern) Combinatorics and topology of complements of planes in  $\mathbb{R}^4$ 

14:45-15:45 Michael Falk (Northern Arizona) Parallel connections, bundles and invariants of arrangements

16:00-17:00 Bruce Sagan (Michigan State) The k-consecutive arrangements

July 17 (Fri)

9:40-10:30 **Peter Orlik** (Wisconsin) Arrangements and hypergeometric integrals (5)

10:45-11:45 **Toshitake Kohno** (Tokyo) Elliptic KZ system, braid group of the torus and Vassiliev invariants

13:30-14:30 **James Damon** (North Carolina) The role of free divisors in the topology and combinatorics of nonlinear arrangements

14:45-15:45 **Katsunori Iwasaki** (Kyushu) Polytopes, invariants, and harmonic functions

16:00-17:00 Michel Deza (Ecole Normale Sup.) Embedding of all regular tilings and star-honeycombs

July 18 (Sat)

9:40-10:30 **Peter Orlik** (Wisconsin) Arrangements and hypergeometric integrals (6)

10:45-11:45 **Sergey Yuzvinsky** (Oregon) Cohomology of the Orlik-Solomon algebras and local systems (joint with Anatoly Libgober)

13:30-14:30 Mutsuo Oka (Tokyo Metropolitan) Geometry of cuspidal sextics and a new Zariski pair

14:45-15:45 Richard Randell (Iowa) Arrangements and the knot configuration space