## Sunday Schedule

9:00-9:15 Introduction
9:15-9:45 J. Sullivan, Sphere packing in geometric knot theory
9:55-10:25 G. Nebe, Strongly perfect lattices
Break (10:25-10:45)
10:45-11:05 M. Henk, Free planes in lattice sphere packings
11:15-11:45 M. Penrose, Random sequential packing and related topics Lunch (11:45-13:30)

13:30-14:00 C. Radin, The symmetry of densest packings
14:10-14:30 L. Bowen, Sphere packings in hyperbolic space
14:40-15:00 F. Vallentin, Towards a dichotomy theorem: local minima and maxima in lattice coverings

Break (15:00-16:00)
16:00-16:30 O. Musin, An extension of Delsarte's method and the kissing problem

Discussion (16:30-17:30)
Dinner
Working groups (20:00-21:00)

Monday Schedule

| 9:00-9:30 | S. Torquato, New lower bounds on the optimal density of sphere <br> packings |
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| 9:30-10:00 | Coffee break |
| 10:00-10:30 | P. Winkler, Some remarks on the hard core model |
| 10:30-11:00 | Break |
| 11:00-11:30 | K. Ball, Plank principles |
| 11:30-13:30 | Lunch |
| 13:30-14:00 | J. Lagarias, Appollonian circle packings |
| $14: 00-14: 30$ | Break |
| $14: 30-14: 50$ | A. Heppes, Densest packing of strings of balls |
| $14: 50-15: 10$ | Break |
| $15: 10-15: 30$ | U. Betke, Finite lattice packings of spheres |
| $15: 30-16: 30$ | Break/Tutorial on statistical mechanics |
| $16: 30-17: 30$ | Problem session |
| $17: 30-19: 00$ | Reception |
| $19: 00-19: 30$ | Dinner |
| $20: 00-21: 00$ | Working groups |

## Tuesday Schedule

9:00-9:30 R. Connelly, The isostatic conjecture in granular materials

9:30-10:00
10:00-10:30
10:30-11:00
11:00-11:30
11:30
11:30-13:30

17:30-19:30
20:00-21:00 Coffee break
H. Cohn, Sphere packing and potential energy minimization Break
S. McLaughlin, Fundamentals of Flyspeck Group photo outside Corbett Hall

Lunch

## AFTERNOON FREE

Dinner
Working groups

Wednesday Schedule

| 9:00-9:30 | R. Kellerhals, Optimal sphere packings and extremal hyperbolic |
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| space forms |  |
| $9: 30-10: 00$ | Coffee break |
| 10:00-10:30 | N. Elkies, Group representations and upper bounds on packings |
| 10:30-11:00 | Break |
| $11: 00-11: 30$ | T. Hales, Formal methods in discrete geometry |
| $11: 30-13: 30$ | Lunch |
| $13: 30-14: 00$ | R. Lyons, Unimodularity for graphs |
| $14: 00-14: 30$ | Break |
| $14: 30-14: 50$ | G. Fejes Toth, On the structure of optimal arrangements |
| $14: 50-15: 10$ | Break |
| $15: 10-15: 30$ | A. Bezdek, On cylinder and sphere packing problems |
| $15: 30-16: 00$ | Break |
| $16: 30-17: 30$ | Problem session |
| $17: 30-19: 30$ | Dinner |
| $20: 00-21: 00$ | Working groups |

