## CREST小谷チーム 「離散幾何学から提案する新物質創成・物性発現の解明」 中間報告会

Date: 2010 年 11 月 5 日(金)~11 月 6 日(土) Place: 東北大学大学院情報科学研究科大講義室

## **PROGRAM**

## November 5 (Fri)

| 13:00-13:10      | Opening Remark  |
|------------------|---|
|                  | Special Session on K4 lattice                             |
| 13:10-14:00      | Toshikazu Sunada (Meiji University)                       |
|                  | Special Invited Talk                                      |
|                  | How was the diamond twin discovered?                      |
| 14:20-14:50      | Seiichi Takami (Tohoku University)                        |
|                  | Experimental challenge to realize K4 lattices             |
|                  | — ТЕА —   |
| 15:20-15:50      | Hirotoshi Kuroda (Tohoku University)                      |
|                  | On the limit behavior of solutions to parabolic equations |
|                  | on thin domains   |
| 16:00-16:30      | Claudio Cacciapuoti (HIM, U.Bonn, JSPS fellow)            |
|                  | Fast solitons on star graphs                              |
| 16:40-17:10      | Makoto Tagami (Tohoku University)                         |
|                  | On Euclidean designs and the potential energy             |
| 17:30-19:30      | —PARTY —  |
|                  |   |
| November 6 (Sat) |   |
| 10:00-10:50      | Uzy Smilansky (Weizman Institute, Team adviser)           |
| 10.00 10.00      | Random d-regular graphs: Combinatorics, spectral          |
|                  | statistics and random waves                               |
|                  | statistics and random waves                               |

| 11:10-12:00 | Shinji Kajimoto (Tohoku University)                      |
|-------------|--|
|             | Toward real-time observation of nano-structures in       |
|             | solutions: Dynamics of laser-induced phase separation in |
|             | liquid mixtures and development of nanosecond structured |
|             | illumination microscopy                                  |
|             | — LUNCH —  |
| 14:00-14:50 | Yohji Akama (Tohoku University)                          |
|             | VC dimension, measure concentration, and consistency of  |
|             | eigenvalues of sample covariance matrix                  |
|             | — TEA —  |
| 15:20-16:10 | Yoshiyuki Kawazoe (Tohoku University)                    |
|             | Fundamental understanding of materials properties with   |
|             | virial theorem based on 3D geometry                      |