



## PHYSIKALISCHES KOLLOQUIUM

*Referent:* **Prof. Dr. Toshikazu Sunada**  
Meiji University, Japan



*Thema:* **Diamond twin revisited**

*Zeit und Ort:* Dienstag, 4.6.2019, 16:40 Uhr  
Recknagel-Bau, Hörsaal REC/C213, Haeckelstr. 3

*Leiter:* Prof. Dr. Dmytro Inosov

*Kurzfassung:* As noticed in 2006 by the speaker of the present talk, the hypothetical crystal---described by crystallographer F. Laves (1932 ) for the first time and designated „Laves' graph of girth ten“ by geometer H. S. M. Coxeter (1955)---is a unique crystal net with a remarkable symmetric structure similar to the diamond crystal, thus deserving to be called the diamond twin although their shapes look quite a bit different at first sight. In this talk, I shall observe an interesting mutual relationship between them, expressed in terms of “orthogonally symmetric lattice“, a generalization of irreducible root lattices. This may give further justification to use the word „twin“.

*Biographie:* Education: University -Tokyo Institute of Technology (BS 1972) / Graduate School -University of Tokyo (MS 1974) / Doctor of Science -University of Tokyo (1977). Position held since graduation: 1974-1975 Research Associate, Nagoya University / 1988-1991 Professor, Nagoya University / 1991-1993 Professor, University of Tokyo / 1993-2003 Professor, Tohoku University / 2003-2019 Professor, Meiji University / 2003--- Professor Emeritus of Tohoku University / 2011-- - Adjunct Professor at WPI Advanced Institute for Material Research, Tohoku University / 2013-2017 Dean of School of Interdisciplinary Mathematical Science, Meiji University / 2019--- Meiji University Distinguished Professor Emeritus (from 2019). Honors: 1988 Iyanaga Prize of Mathematical Society of Japan (MSJ) / 2013 MSJ Publication Prize / 2017 Fujiwara Hiroshi Prize for Mathematical Sciences / 2018 Prizes for Science and Technology (The Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science and Technology) / 2019 1st Kodaira Kunihiko Prize of MSJ.

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