

【RIMS 合宿型セミナー】

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② 題 目：			
(英 文 名 : Pattern formation and defects in biology and materials science)			
③実施期間： 令和元年 10月 8日～ 令和元年 10月 11日 (4 日間)			
④参加者数： 18名 (内、外国人 4人)			
⑤講 演 数： 18 コマ (内、英語で行われたもの 18コマ)			
⑥合宿型セミナーの概要 (開催目的、成果など)： Our Gasshuku saw participation of a very international and mixed group of mathematical/numerical analysts, mechanical modelists and materials scientists. The main purpose of this conference has been fostering the interaction of theoretical scientists and experimentalists. Among the main results, intense discussions have been carried on on the mechanical modeling of plastification observed in metal alloys with relevant applications in metal strengthening; statistical analysis and stochastic modeling of lattice avalanches in Shape-Memory Alloys (one paper on the way); mathematical analysis of mechanical atomistic model of wedge disclinations (2 papers on their way);). Moreover, the interaction of specialists in mathematical biology and materials science opened new questions like the relevance of carbon compounds absorbed on material surfaces where they are typically concentrated in very thin films. This workshop contributed to stimulate the partnership between mathematical biologists and material scientists. From the mathematical point of view, most of the problems analyzed lie in the framework of energy minimization and asymptotics of problems with variational structure and systems of coupled, highly non-linear Parabolic Equations.			
研 究 成 果 の 公 表 方 法	⑦ 講究録を <input type="checkbox"/> 発行する <input checked="" type="checkbox"/> 発行しない ※発行する場合：原稿完成予定時期 年 月 日頃		
	⑧ 講究録以外の方法で報告集を発行する場合： タイトル： 出版社： 出版予定時期： 年 月 日頃		
	⑨ 専門誌等による場合： 主要な論文リスト (掲載予定、プレプリントを含む。準備中も可) <u>P. Cesana, P. van Meurs</u> , Discrete-to-continuum limits of planar disclinations, to be submitted <u>P. Cesana, P. van Meurs</u> , An alternative proof in the analysis of 2D models for wedge disclination, planned paper <u>T. Inamura, D. Osanai, P. Cesana, Y. Shinohara, M. Tahara, H. Hosoda</u> , Emergence of power-law in martensite microstructure, planned paper		