1. 研究活動

「平成 19 年度の活動記録は平成 19 年 11 月末に集計をしたものである.」

主に H19 年度, H18 年度の研究成果を示す.
†COE 関連の研究成果.
* 招待論文，招待講演，基調講演など.
^{d} 博士後期課程在籍の学生による成果.
^{m} 上記以外の学生による成果.

1.1 学術論文

複雑系の数理解析グループ

応用解析学講座

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複雑流体現象の解明とそのモデリンググループ

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1.5 国内口頭発表

グループ	研究室数	年度	口頭発表件数		学生による発表件数		博士課程の学生による発表	
			合計件数	COE 関連	合計件数	COE 関連	合計件数	COE 関連
数理	5	H19	68	60	29	26	10	10
		H18	117	91	40	34	22	22
		H17	87	73	33	31	3	3
		H16	86	79	28	27	2	2
		H15	91	68	21	19	3	3
		小計	449	371	151	137	40	40
流体	9	H19	88	74	46	42	14	14
		H18	99	73	61	56	17	17
		H17	69	60	31	28	17	17
		H16	67	61	41	34	14	14
		H15	87	43	32	11	10	7
		小計	410	311	211	171	72	69
材料	11	H19	142	110	69	58	15	12
		H18	176	153	96	86	13	10
		H17	183	119	85	56	9	5
		H16	212	142	104	67	6	5
		H15	149	70	87	43	5	4
		小計	862	594	441	310	48	36
制御・設計	10	H19	116	57	72	28	18	6
		H18	135	85	78	50	17	13
		H17	119	70	65	37	2	2
		H16	176	110	123	82	4	4
		H15	117	44	74	31	5	5
		小計	663	366	412	228	46	30
全体	35	H19	414	301	216	154	57	42
		H18	527	402	275	226	69	62
		H17	458	322	214	152	31	27
		H16	541	392	296	210	26	25
		H15	444	225	214	104	23	19
		小計	2384	1642	1215	846	206	175

1.6 特許

平成 18, 19 年度に公開もしくは登録された特許を以下に示す．COE 関連特許にを † 付した．

発明の名称	発明者	特許権者、出願人	登録・公開番号	公開年度
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デジタル/アナログ変換装置及び該装置に用いるデジタルフィルタの設計方法	山本裕	山本裕	特許第 3820331 号	18
サンプリングレート変換装置	山本裕、永原正章	山本裕	特許第 3851757 号	18
† 混合気体の分離方法，及び気体分離装置	杉元宏，高田滋，小菅真吾，竿田武則	京都大学	特開 2006-218421	18
Plasma Processing Equipment	斧　高一、上坂　祐之、石橋　清隆、沢田　郁夫	京都大学、東京エレクトロン	米国 11/630.774	19
半導体処理装置のクリーニング方法およびシリコン基板のエッチング方法	斧　高一、北川　智洋、井上　實、大沢　正典	京都大学、大陽日酸	特開 2006-179834	18
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遠隔操縦装置	横小路泰義，佐藤祐司，河田浩平，白土浩司	京都大学	WO/2006/129455	18
検索装置	椹木哲夫，堀口由貴男	京都大学	特開 2006-85389	18
データベース作成プログラム，同プログラムを記録したコンピュータ読み取り可能な記録媒体，データベース作成装置，同方法及びデータベース作成システム	田雅杰、椹木哲夫	田雅杰	特許第 3804937 号	18
† 組み合せ計量装置	椹木哲夫、堀口由貴男、朝倉涼次、玉井　裕、橋口伸樹、小西洋江、内藤和文	株式会社イシダ、京都大学	特開 2007-248199	19
† 最適設計支援装置、最適設計支援方法及び最適設計支援プログラム	山下進介、小林正和、西脇眞二、泉井一浩、吉村允孝、富田直秀	京都大学	台湾 94123844	18
†Optimal design support system, optimal design support method and optimal design support program	山下進介、小林正和、西脇眞二、泉井一浩、吉村允孝、富田直秀	京都大学	米国 11/632,406	19
†Optimal design support system, optimal design support method and optimal design support program	山下進介、小林正和、西脇眞二、泉井一浩、吉村允孝、富田直秀	京都大学	欧州 05 765 800.7	19
揺動体に対するコリオリ力を利用した吸振器	松久寛，安田正志	京都大学，特許機器	特開 2006-258141	18
ワイヤーの動吸振装置	宇津野秀夫、松久寛、勝野友介	京都大学	特開 2007-309411	19
† 組織欠損補綴材料固定治具	平　嗣良，森川訓行，脇谷滋之，富田直秀	グンゼ，信州大学，京都大学	特開 2006-230874	18
三次元駆動機	松原　厚，河野大輔，塩崎正人，濱村　実	東芝機械，京都大学	意匠登録第 1288427 号	18

1.7 受賞

受賞者	賞の名称
	H19 年度
† 山本裕	文部科学大臣表彰，科学技術賞（研究部門）
† 杉元宏	第３２回熊谷記念真空科学論文賞
†^{m} 畑 斉樹	学生プレゼンテーション賞 (第 28 回日本熱物性シンポジウム)
吉田英生	日本機械学会創立１１０周年記念功労者
^{m} 平子俊博	日本機械学会三浦賞
平方寛之，高橋可昌，新見耕二，Do Van Truong，北村隆行	日本材料学会賞（論文）
^{d} 嶋田隆広	日本材料学会 MD 賞
木村健二	日本機械学会賞
^{m} 丸岡有記子	バイオフロンティア講演会フェロー賞
Taiji Adachi	APACM Award for Young Investigator in Computational Mechanics
宮崎則幸	APACM Computational Mechanics Award
宮崎則幸	JACM Computational Mechanics Award
宮崎則幸	日本機械学会創立 110 周年会員功労者
Masamitsu Kurisu, Hiroki Muroi, Yasuyoshi Yokokohji, Hiroyuki Kuwahara	IEEE International Conference on Mechatronics and Automation (ICMA 2007), Best Conference Paper Award Finalist
† 西脇眞二	日本機械学会設計工学・システム部門業績賞
吉村允孝	日本機械学会創立１１０周年記念功労者表彰
寺村聡	21st European Society for Biomaterial，Student Travel Award
茨木創一，清水拓也，松原厚	Best Paper Award (4th International Conference on Leading Edge Manufacturing in 21st Century)
松下哲也，上野 浩，松原　厚	Best Paper Award (4th International Conference on Leading Edge Manufacturing in 21st Century)
小森雅晴	日本機械学会機素潤滑設計部門　機素潤滑設計部門奨励講演　受賞
	H18 年度
†^{m} 合原一究	THE TWELFTH INTERNATIONAL SYMPOSIUM ON ARTIFICIAL LIFE AND ROBOTICS, Young Author Award
^{m} 榊原文平	混相流学会学生優秀講演賞
黒瀬良一	APT Distinguished Paper Award, The Society of Powder Technology, Japan
†^{m} 鵜飼 賢	学生プレゼンテーション賞 (第 27 回日本熱物性シンポジウム)
牧野俊郎	日本機械学会熱工学部門研究功績賞受賞
^{m} 嶋田隆広	日本機械学会三浦賞
† 北條正樹	日本複合材料学会フェロー
安達泰治	日本臨床バイオメカニクス学会　学会奨励賞
^{m} 植田充彦	バイオフロンティア
†^{m} 荻野岳洋	EMAP2006 Student awards
† 池田　徹、宍戸信之、宮崎則幸	溶接学会シンポジウム賞 Mate 2006 優秀論文賞
† 鈴木孝明，秦　秀敏，新宅博文，神野伊策，小寺秀俊	日本 AEM 学会賞
†^{m} 桑原健雄	日本機械学会　情報・知能・精密機器部門　ベストプレゼンテーション表彰
† 谷口忠大，椹木哲夫	2006 年度システム制御情報学会学会賞「論文賞」
杉本靖博	ロボット学会研究奨励賞
杉本靖博	日本機械学会ロボティクスメカトロニクス部門 Robomec 賞
† 杉本靖博	第 11 回ロボティクスシンポジア特別奨励賞
^{d}Mohammed Sharif Uddin	マザック財団優秀論文表彰
松原厚	2006 年度精密工学会春季大会学術講演会 ベストオーガナイザー賞
^{d} 竹岡郁	三浦賞

†COE 関連の業績での受賞.
^{d} 筆頭受賞者が博士後期課程の学生である.
^{m} 筆頭受賞者が博士後期課程以外の学生である.