



UNIVERSITAS GADJAH MADA

Faculty of Mathematics and Natural Sciences

Mathematics Department

Sekip Utara Bulaksumur Yogyakarta 55281 Telp: +62 274 552243 Fax: +62 274 555131 Email: math@ugm.ac.id Website: matematika.fmipa.ugm.ac.id

Undergraduate Program in Mathematics

Telp : +62 274 552243

Email : maths1@ugm.ac.id; kaprodi-s1-matematika.mipa@ugm.ac.id
sekprodi-s1-matematika.mipa@ugm.ac.id

Website : <http://s1math.fmipa.ugm.ac.id/>

STAFF HANDBOOK

Name	Indah Emilia Wijayanti		
Post	Algebra		
Academic Career		Institution	Year
	Initial Academic Appointment	Universitas Gadjah Mada	1994
	Post Doctoral		
	Doctoral Degree	Heinrich Heine University of Duesseldorf, Germany	2006
	Master Degree	Universitas Gadjah Mada	1998
	Undergraduate Degree	Universitas Gadjah Mada	1993
Employment		Employer	Period
	Instructor	Universitas Gadjah Mada	1994 – 2010
	Assistant Professor	Universitas Gadjah Mada	2010 – 2012
	Associate Professor	Universitas Gadjah Mada	2012 – now
	Full Professor		
Research and development projects over the last 5 years	<ol style="list-style-type: none"> 1. Subinjectivity Domains (Sergio Lopez-Permouth - PI, Indah Emilia Wijayanti, Sergio Zamora-Erazo, Bulent Sarac), partially funding by Senior Research Program of Fulbright in Ohio University Center of Ring Theory and Applications, year 2016, grant USD 9380. 2. \star-rings and \star-modules (Indah Emilia Wijayanti – PI, Puguh Wahyu Prasetyo, Halina France-Jackson, Joe Repka), partially funding by Sandwich-like Program of DIKTI in University of Toronto, Canada, year 2016, grant CAD 3415. 3. Sub-exact Sequences (Indah Emilia Wijayanti – PI, Fitriani, Budi Surodjo, Bijan Davvaz), year 2016. 4. Representation of Rings over Modules (Sri Wahyuni - PI, Na'imah Hijriati, Indah Emilia Wijayanti), year 2016. 5. Sifat-sifat Submodul Prima-S(N) Lokal dalam Modul Multiplikasi-S(N) dan Dualisasinya (Indah Emilia Wijayanti – PI, Sri Wahyuni), Hibah Penelitian Kompetensi DIKTI tahun 2015 dan 2016, total grant Rp. 235.200.000,00. 6. Derived Equivalence for Hopf Algebras (Intan Muchtadi Alamsyah – PI, Indah Emilia Wijayanti, Dellaviha Nasution, Alexander Zimmermann), Hibah Kerjasama Luar Negeri DIKTI, tahun 2016 Rp. 150.000.000,00. 		

	<ol style="list-style-type: none"> 7. Distributed Model Predictive Control for Traffic Systems with Dynamic Game Approach (Salmah-PI, Indah Emilia Wijayanti, Abdurakhman, Jacob Engwerda, Bart de Schutter), Hibah Kerjasama Luar Negeri dan Publikasi Internasional, DIKTI tahun 2015 dan 2016, total grant Rp. 300.000.000,00 8. Identitas Macwilliam pada Kode Linear Atas Daerah Integral Menggunakan Karakter yang Diperumum (Indah Emilia Wijayanti – PI, Arif Munandar), Hibah Penelitian Dosen Departemen Matematika FMIPA UGM Tahun 2016, Rp. 15.000.000,00 9. Penerapan Teori Radikal pada Latis Submodul dan Latis Ideal, (Indah Emilia Wijayanti – PI, Muhammad Ardiyansyah, Puguh Wahyu Prasetyo), Hibah Penelitian Dosen Jurusan Matematika FMIPA UGM Tahun 2015, Rp. 10.000.000,00 10. Pemetaan pada Latis Submodul dan Latis Ideal Serta Hubungannya dengan Modul Komultiplikasi (Indah Emilia Wijayanti – PI, Muhammad Ardiyansyah), Hibah Penelitian Dosen Jurusan Matematika FMIPA UGM Tahun 2014, Rp. 10.000.000,00 11. Equivalences singulières et catégories dérivées des algèbres de Hopf (Alexander Zimmermann (France, PI), Intan Muchtadi Alamsyah , Yuming Liu (China), Guodong Zhou, Indah Emilia Wijayanti), STIC Asie, Project ESCAP du Ministère des Affaires Etrangères de la France (France), year 2013, grant EUR 1300. 12. Clean Coalgebras (Indah Emilia Wijayanti – PI, Robert Wisbauer – Host Professor in Heinrich Heine University of Duesseldorf, Germany), DAAD Re-Invitation Program (Germany), grant EUR 4157. 13. Submodul Kedua pada Modul Komultiplikasi atas Ring Sebarang (Indah Emilia Wijayanti – PI, Laila Dini Anggraini, Lalu Irman Suhaedading), Hibah PUPTN Insentif Penelitian Mahasiswa UGM, tahun 2013, Rp. 7.500.000,00 14. Modul Fraksi dari Modul Multiplikasi (Indah Emilia Wijayanti – PI, Uha Isnaini), Hibah Penelitian Jurusan Matematika FMIPA UGM, tahun 2013, Rp. 10.000.000,00 15. Sifat-sifat submodul prima penuh (Indah Emilia Wijayanti - PI, Sri Wahyuni, Dian Ariesta Yuwaningsih), Hibah Penelitian Kompetensi DIKTI tahun 2013, Rp. 115.000.000,00 16. Pembagian Rahasia Shamir Menggunakan Kode Linear (Indah Emilia Wijayanti-PI, Riningsih), Hibah Penelitian Kolaborasi Dosen Mahasiswa UGM tahun 2012, Rp. 6.500.000,00 17. Submodul Prima dan Radikal Prima pada Modul Perkalian atas Ring Sebarang (Indah Emilia Wijayanti), Hibah Penelitian non-Kompetisi Jurusan Matematika FMIPA UGM tahun 2012, Rp. 5.000.000,00 18. R-Aljabar Bersih (Indah Emilia Wijayanti - PI, Uha Isnaini, Kartika Sari, Cyrenia Novella), Hibah Penelitian Jurusan Matematika FMIPA UGM tahun 2011, Rp. 10.000.000,00 19. Hybrid Modeling and Control for Intelligent Unmanned Aerial Vehicle (Salmah-PI, Endra Joelianto, Indah Emilia Wijayanti, Kwang Joon Yoon, Agus Budiono), Hibah Kerjasama Luar Negeri dan Publikasi Internasional DIKTI tahun 2010, 2011 dan 2012, total grant Rp. 639.480.000
Industry collaborations	Project title : ---

over the last 5 years	Partners: ---	
Patents and proprietary rights	Title	Year
	<i>Text book</i> : Aljabar Linear 2 (Rizky Rosjanuardi, Sri Wahyuni, Indah Emilia Wijayanti), Universitas Terbuka.	2010
	<i>Text book</i> : Dasar-Dasar Aljabar Linear dan Penggunaannya dalam Berbagai Bidang (Indah Emilia Wijayanti , Sri Wahyuni, Yeni Susanti), Gadjah Mada University Press.	2015
	<i>Text book</i> : Teori Ring dan Modul (Sri Wahyuni, Indah Emilia Wijayanti , Dian Ariesta Yuwaningsih, Ari Dwi Hartanto), Gadjah Mada University Press.	to appear 2016
Important publications over the last 5 years	Selected recent publications form a total of approx.: 20 from app. 30	
	Sri Wahyuni, Indah Emilia Wijayanti, Halina France-Jackson, <i>Prime essential ring that generates a special atom</i> , accepted in Bulletin of the Australian Mathematical Society.	
	Fitriani, B. Surodjo, I.E. Wijayanti, <i>On Sub-exact Sequences</i> , FJMS vol. 100 no. 7, 1055 – 1065, 2016.	
	Sutopo, Indah Emilia Wijayanti, Sri Wahyuni: <i>Some results on graded N-prime submodules</i> , FJMS vol. 99 no. 9, 1399 – 1408, 2016.	
	A. Ismarwati, H. France-Jackson, Sri Wahyuni, I. E. Wijayanti: <i>On nice modules</i> . JP Journal of Algebra, Number Theory and Applications 05/2016; 38(3). DOI:10.17654/NT038030213	
	Puguh Wahyu Prasetyo, Indah Emilia Wijayanti, Halina France-Jackson: <i>Some Special Class u Whose Upper Radical $U(u)$ Determined by u Coincides With The Upper Radical $U(*u)k$ Determined by $(*u)k$</i> . AIP Conference Proceedings 02/2016; 1707(1). DOI:10.1063/1.4940814	
	Puguh Wahyu Prasetyo, Ratna Setyaningsih, Indah Emilia Wijayanti, Halina France-Jackson: <i>Some properties of prime essential rings and their generalization</i> . ADVANCES OF SCIENCE AND TECHNOLOGY FOR SOCIETY: Proceedings of the 1st International Conference on Science and Technology 2015 (ICST-2015); 07/2016	
	Indah Emilia Wijayanti, Rosi Widia Asiani, Dian Ariesta Yuwaningsih, Sri Wahyuni : <i>On $S(N)$-locally prime submodules and the dualization</i> . The 7th SEAMS-UGM International Conference on Mathematics and its Applications; 02/2016	
	Diari Indriati, Widodo, Indah E. Wijayanti, Kiki A. Sugeng, Martin Bača: <i>On Total Edge Irregularity Strength of Generalized Web Graphs and Related Graphs</i> . Mathematics in Computer Science 05/2015; 9(2). DOI:10.1007/s11786-015-0221-5	
	Khurul Wardati, Indah Emilia Wijayanti, Sri Wahyuni, <i>On free ideals in free algebras over a commutative ring</i> , Journal of Indonesian Mathematical Society (JIMS) Vol. 21 No. 1, 59-69, 2015.	
	Dian Ariesta Yuwaningsih, Indah Emilia Wijayanti, <i>On jointly prime radicals of (R,S)-modules</i> , Journal of Indonesian Mathematical Society (JIMS) Vol. 21 No. 1, 25-34, 2015	
	Indah Emilia Wijayanti: <i>On left residuals of submodules in fully multiplication modules</i> . JP Journal of Algebra, Number Theory and Applications 03/2015;	

	36(1). DOI:10.17654/JPANTAFeb2015_017_028		
	Indah Emilia Wijayanti, <i>Endo-prime submodules in endo-multiplication modules</i> , International Mathematical Forum (IMF), Vol. 9 No. 27, 1321- 1332, 2014		
	E. Herawati, M. Mursaleen, Supama, I.E. Wijayanti: <i>Order matrix transformations on some Banach lattice valued sequence spaces</i> . Applied Mathematics and Computation 11/2014; 247. DOI:10.1016/j.amc.2014.09.019		
	K. Wardati, I.E. Wijayanti, S. Wahyuni: <i>On primeness of path algebras over a unital commutative ring</i> . JP Journal of Algebra, Number Theory and Applications 09/2014; 34(2).		
	D. Indriati, Widodo, I.E. Wijayanti, K.A. Sugeng: <i>On the total edge irregularity strength of gear and related graphs</i> . Far East Journal of Mathematical Sciences 07/2014; 90(1).		
	Halina France-Jackson, Sri Wahyuni, Indah Emilia Wijayanti: <i>Radical related to special atoms revisited</i> . Bulletin of the Australian Mathematical Society 04/2014; 91(02). DOI:10.1017/S0004972714000811		
	Diari Indriati, Widodo, Indah Emilia Wijayanti, Kiki Ariyanti Sugeng: <i>On the total edge irregularity strength of generalized helm</i> . AKCE International Journal of Graphs and Combinatorics 08/2013; 10(2).		
	Elvina Herawati, Supama, Indah Emilia Wijayanti, <i>The locally boundedness criteria for superposition operator on $l_\phi(L)$</i> , Applied Mathematical Sciences, Vol. 7 no. 15, 727-733. 2013		
	Indah Emilia Wijayanti, <i>On Product of N-Cogroup</i> , Journal of Indonesian Mathematical Society (JIMS) Vol. 18 No. 2, 101-111, 2012		
	J. C. Engwerda, S. Salmah, I. E. Wijayanti: <i>The (multi-player) linear quadratic state feedback control problem for index one descriptor systems</i> . Journal of the Franklin Institute 12/2011; 348(10). DOI:10.1016/j.jfranklin.2011.10.002		
Activities in specialist bodies over the last 5 years (Membership without a specific role need not be mentioned)	Organization	Role	Period
	Indonesian Mathematical Society	Secretary	2010 - 2012
	Indonesian Mathematical Society	Coordinator of Algebra Research Group	2012 – 2014
	Indonesian Mathematical Society	Coordinator of Division of Research Development	2014 - 2016
	Himpunan Peminat Aljabar (Indonesian Algebraic Society)	Chair	2007 – 2011
	Komunitas Peminat Aljabar (Indonesian Algebraic Society)	Co-Chair	2014 – 2017