Profile Page



Name : Dr Jaspal Singh Aujla

Designation : Professor

Department : Mathematics

Qualification : PhD. Mathematics (Panjab University Chandigarh)

MSc. Mathematics (Panjab University Chandigarh)

BA (Panjab University Chandigarh)

Post Doctorate Mathematics (University of Lisbon, Portugal)

Address : A-7, Br B R Ambedkar, National Institute of Technology,

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Research Interests:

Matrix Analysis

Other Profile Links:

Google Scholar Link:

Jaspal Singh Aujla Click Here

Journal Publications:

Year	Journal	Publication
2022	Operators and Matrices	Manisha Devi, Jaspal Singh Aujla, A norm inequality for some special
		functions, (2022)
2020	Linear and Multilinear Algebra	Isha Garg, Jaspal Singh Aujla, Inertia of non-integer Hadamard powers of
		a non-negative matrix, 68 (2), 410-416 (2020).
2020	Advances in Operator Theory	Rajinder Pal, Mandeep Singh, Jaspal Singh Aujla, Some norm
		inequalities for operators, 5, 627-639 (2020)
2018	Linear and Multilinear Algebra	Isha Garg, Jaspal Singh Aujla, Inertia of some special matrices, 66 (3),
		602-607 (2018).
2018	Linear and Multilinear Algebra	Isha Garg, Jaspal Singh Aujla, Some singular values inequalities, 66,
		776-783 (2018).
2016	Linear and Multilinear Algebra	Rajinder Pal, M S Moslehian, Mandeep Singh, Jaspal Singh Aujla, A new
		class of operator monotone function via operator means, 64, 2463-2473
		(2016).
2014	Linear and Multilinear Algebra	Rajinder Pal, Mandeep Singh, Jaspal Singh Aujla, Generalized operator
		version of Bernoulli's inequality, 62, 267-273 (2014).
2012	Linear Algebra and its	Jagjit Singh Matharu, Jaspal Singh Aujla, Some inequalities for unitarily
	Applications	invariant norms, 436, 1623-1631 (2012).

2012	Linear Algebra and its	M S Moslehian, Jagjit Singh Matharu, Jaspal Singh Aujla,
	Applications	Non-commutative Callebaut inequality, 436, 3347-3357 (2012).
2012	Linear and Multilinear Algebra	Koenraad M R Audenaert, Jaspal Singh Aujla, On norm sub-additivity
		and super-additivity inequalities for concave and convex functions, 60,
		1369-1389 (2012).
2012	Linear Algebra and its	Rupinderjit Kaur, Mandeep Singh, M S Moslehian, Jaspal Singh Aujla, A
	Applications	double inequality related to operator means and positive linear maps, 437,
		1016-1024 (2012).
2012	Mathematical Sciences	H Sharma, Jaspal Singh Aujla, A certain family of mixed
		summation-integral type Lupas-Phillips-Bernstein operators, 6, (2012).
2011	Linear Algebra and its	Rupinderjit Kaur, Mandeep Singh, Jaspal Singh Aujla, Generalized
	Applications	matrix version of reverse Holder inequality, 434, 636-640 (2011).
2011	Journal of Mathematical Physics	Jaspal Singh Aujla, A simple proof of Lieb concavity theorem, 52 (2011).
2011	Mathematical Inequalities and	Jagjit Singh Matharu, Jaspal Singh Aujla, Some majorization inequalities
	Applications	for convex functions of several variables, 14, 947-956 (2011).
2011	Linear Algebra and its	Jagjit Singh Matharu, Jaspal Singh Aujla, M S Moslehian, Eigenvalue
	Applications	extensions of Bohr's inequality, 435, 270-276 (2011).
2011	Bulletin of Mathematical Analysis	Jaspal Singh Aujla, S Dragomir, M Khosravi, M S Moslehian,
	and Applications	Refinments of Choi-Davis-Jensen's inequality, 3, 127-133 (2011).
2010	Mathematical Inequalities and	Jagjit Singh Matharu, Jaspal Singh Aujla, Some inequalities for
	Applications	Hadamard product and operator means, 13, 643-654 (2010).
2009	Journal of Inequalities in Pure and	Jagjit Singh Matharu, Jaspal Singh Aujla, Hadamard product version of
	Applied Mathemtics	Kantorovich and Chebyshev inequalities, 10, 6 pages, (2009).
2007	Linear Algebra and its	Jaspal Singh Aujla, J C Bourin, Eigenvalues inequalities for convex and
	Applications	log convex functions, 424, 25-35 (2007).
2003	Linear Algebra and its	Jaspal Singh Aujla, F C Silva, Weak majorization inequalities and convex
	Applications	functions, 369, 217-233 (2003).
2003	Mathematical Inequalities and	Mandeep Singh, Jaspal Singh Aujla, A note on Weyl's interlacing
	Applications	inequality, 6, 375-378 (2003).
2002	Linear Algebra and its	Jaspal Singh Aujla, Some norm inequalities for completely monotone
	Applications	functions II, 359, 59-65 (2002).
2001	Linear and Multilinear Algebra	Jaspal Singh Aujla, Mandeep Singh, H L Vasudeva, Inequalities for
		Hadamard product and unitarily invariant norms, 48, 247-262 (2001).
2001	Mathematical Inequalities and	Jaspal Singh Aujla, Perturbation bounds for certain matrix functions, 4,
	Applications	609-617 (2001).
2001	Rend. Matematico	Jaspal Singh Aujla, Mandeep Singh, Some inequalities for operator
		means and shorted operators, 59, 189-198 (2001).
2000	Linear Algebra and its	Jaspal Singh Aujla, On an operator inequality, 310, 43-47 (2000).
	Applications	
2000	SIAM Journal of Matrix Analysis	Jaspal Singh Aujla, Some norm inequalities for completely monotone
	and Applications	functions, 22, 569-573 (2000).
2000	Publikacije Elektrotec Matematika	Jaspal Singh Aujla, Mandeep Singh, H L Vasudeva, Log convex matrix
		functions, 11, 19-32 (2000).
1999	Linear Algebra and its	Jaspal Singh Aujla, A fixed point theorem and a norm inequality for
	Applications	operator means, 290, 109-118 (1999).
1999	Mathematical Inequalities and	Jaspal Singh Aujla, Mandeep Singh, Some norm inequalities involving
	Applications	functions of two variables, 2, 561-568 (1999).
1999	Advancing in Modeling and	Sheo Kumar, Jaspal Singh Aujla, M C Wadhawan, Convergence of
	Analysis	methods for nonlinear second kind voltera integral equations with
		singular or periodic kernels, 36, 59-67 (1999).
1997	Linear Algebra and its	Jaspal Singh Aujla, Some operator equalities involving connections and
	Applications	means, 259, 223-228 (1997).

1996	Linear Algebra and its	Jaspal Singh Aujla, H L Vasudeva, Some convex and monotone matrix
	Applications	functions, 248, 47-60 (1996).
1995	Annals Polonici Mathematici	Jaspal Singh Aujla, H L Vasudeva, Convex and monotone operator
		functions, LXII, 1-11 (1995).
1995	Mathematica Japonica	Jaspal Singh Aujla, H L Vasudeva, Operator inequalities related to
		operator means, 41, 383-388 (1995).
1995	Mathematica Japonica	Jaspal Singh Aujla, H L Vasudeva, Inequalities involving Hadamard
		product and operator means, 42, 265-272 (1995).
1993	Linear Algebra and its	Jaspal Singh Aujla, Matrix convexity of functions of two variables, 194,
	Applications	149-160 (1993).

Research Projects:

Role	Project	Title	Funding	From	То	Amount	Status	Co-Investi
	Type		Agency					gator
Inviting	Research	Visit of Dr J	Government	21-09-2006	30-09-2006	150000	Complete	Dr J C
person		C Bourin to	of India and				d	Bourin
		the institute	French					
		under	Government					
		Indo-French						
		Institute of						
		Mathematics						

Events Organized:

Category	Type	Title	Venue	From	То	Designation
Short Term	National	Awareness and	Dr B R Amberkar,	27-10-2008	27-10-2008	Professor
Course		Motivational Course for	National Institute of			
		Students from Rural	Technology,			
		Schools	Jalandhar, Punjab,			
			INDIA			
Conference	National	25-th Annual	Dr B R Amberkar,	03-05-2010	05-05-2010	Professor
		Conference of the	National Institute of			
		Ramanujan	Technology,			
		Mathematical Society	Jalandhar, Punjab,			
			INDIA			
Conference	International	Conference on Matrix	Dr B R Amberkar,	30-11-2017	02-12-2017	Professor
		and Functional Analysis	National Institute of			
		(In honour of Professor	Technology,			
		Rajendra Bhatia on his	Jalandhar, Punjab,			
		65-th birthday)	INDIA			
Competitive	National	Conducted Regional	Dr B R Ambedkar,	1997	2001	Local
Examination		Math. Olympiad on	National Institute of			Coordinator
		behalf of the National	Technology			
		Board of Mathematics	Jalandhar, Punjab,			
		between 1997-2001 for	INDIA			
		the benefit of local and				
		nearby districts students				

Professional Affiliations:

Designation	Organization
Life Member	Indian Mathematical Society

Life Member	Ramanujan Mathematical Society
Life Member	Punjab Academy of Sciences
Member	American Mathematical Society
Senior Associate (2011-2017)	Abdul Salam International Centre for Theoretical Physics, Trieste, ITALY

PhD Supervised:

Scholar Name	Research Topic	Status	Year	Co-Supervisor
Anchal Aggarwal	Operator and Associated Norm Inequalities	Completed	2021	Jaspal Singh Aujla
Rajinder Pal	On Matrix Inequalities	Completed	2020	Jaspal Singh Aujla
Isha Garg	Inequalities and Positivity Properties of Some	Completed	2019	Not Applicable
	Special Matrices			
Honey Sharma	Approximation Properties of Positive Linear	Completed	2015	Not Applicable
	Operators Using q-Calculus			
Rupinderjit Kaur	Inequalities Involving Matrix Functions	Completed	2015	Jaspal Singh Aujla
Jagjit Singh	Matrix Inequalities	Completed	2011	Not Applicable
Manisha Devi	Some Norm Inequalities	On going		Not Applicable

Admin. Responsiblities :

Position Held	Organization	From	To
Head of Department	Dr B R Ambedkar, National Institute of	01-09-2007	31-08-2009
	Technology, Jalandhar, Punjab, INDIA		
Dean Students Welfare	Dr B R Ambedkar, National Institute of	01-02-2015	24-01-2017
	Technology, Jalandhar, Punjab India		
Professor Incharge Security	Dr B R Ambedkar, National Institute of	30-11-2006	13-03-2007
	Technology, Jalandhar, Punjab India		
Appellate Authority	Dr B R Ambedkar, National Institute of	24-01-2017	Till Date
	Technology, Jalandhar, Punjab India		
Professor Incharge Cooperative	Dr B R Ambedkar, National Institute of	1995	2001
Store	Technology, Jalandhar, Punjab India		
Member Senate	Dr B R Ambedkar, National Institute of	08-08-2004	Till Date
	Technology, Jalandhar, Punjab India		

Award and Honours:

Title	Activity	Given by	Year
Senior Associate	ior Associate Research Abdul Salam International		2011-2017
	Centre for Theoretical		
		Physics, Trieste, ITALY	
Merit Scholarship	Education	Government of Punjab	1978-1987