

## Publications: Willi-Hans Steeb

257. Hardy Y, Fošner A and Steeb W-H  
Cayley transform and the Kronecker product of Hermitian matrices  
Linear Algebra and its Applications (in press)
256. Steeb W-H and Hardy Y  
An eigenvalue problem for a Fermi system and Lie algebras  
Quantum Information Processing  
DOI: 10.1007/s11128-013-0650-5 (2013)
255. Steeb W-H and Hardy Y  
Exceptional Points, Nonnormal Matrices, Hierarchy of Spin Matrices and an Eigenvalue Problem  
<http://arxiv.org/abs/1301.2900>
254. Steeb W-H and Hardy Y  
Hamilton Operator, Discrete Symmetries, Brute Force and SymbolicC++  
International Journal of Modern Physics C **24**, 1250095 (2013)  
DOI: 10.1142/S012918311250097
253. Steeb W-H  
Triple Spin Interaction and Entanglement  
Zeitschrift für Naturforschung **68a**, 172-177 (2013)  
DOI: 10.5560/ZNA.2012-0087
252. Hardy Y and Steeb W-H  
Spin-Hamilton Operator, Graviton-Photon Coupling and an Eigenvalue Problem  
<http://arxiv.org/abs/1209.6494v1>
251. Steeb W-H, Hardy Y and de Greef J  
Spin Hamilton Operators, Symmetry Breaking, Energy Level Crossing and Entanglement  
Zeitschrift für Naturforschung **67a**, 608-612 2012  
<http://arxiv.org/abs/1110.4204>
250. Hardy Y and Steeb W-H  
A Sequence of Quantum Gates  
International Journal of Geometric Methods in Modern Physics **9**, 1220013-1 (2012)
249. Steeb W-H and Hardy Y  
Entanglement, Kronecker Product, Pauli Spin Matrices and a Nonlinear Eigenvalue Problem  
Open Systems and Information Dynamics **19**, 1250004-1 (2012)
248. Steeb W-H, Hardy Y and Tanski I

- Vector Fields, Variational Equations and Commutators  
International Journal of Bifurcation and Chaos **22**, 1250190-1 (2012)
247. Steeb W-H  
Autonomous Dynamical Systems, Explicitly Time Dependent First Integrals, and Gradient Systems  
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246. Steeb W-H, Hardy Y and Tanski I  
Vector Product and an Integrable Dynamical System  
Communications in Theoretical Physics **56** 992–994 2011
245. Steeb W-H  
Hyperdeterminant and an integrable partial differential equation  
arXiv:1108.4261v1  
<http://arxiv.org/abs/1108.4261>
244. Steeb W-H and Hardy Y  
 $N$ -tangle, entangled orthonormal basis and a hierarchy of spin Hamilton operators  
Zeitschrift für Naturforschung **66a** 615–619 2011
243. Hardy Y and Steeb W-H  
Unitary Matrices and Commutators  
International Journal of Geometric Methods in Modern Physics **8** 1583–1592 2011
242. Kern A, Martignoli S, Mathis W, Steeb W-H, Stoop R L and Stoop R  
Analysis of the Sonar Hopf Cochlea  
Sensors **11** 5808-5818 2011
241. Hardy Y and Steeb W-H  
Genetic Algorithms and Optimization Problems in Quantum Computing  
International Journal of Modern Physics C **21** 1359–1375 2010
240. Steeb W-H and Hardy Y  
A Chaotic Map and Data Communication  
Zeitschrift für Naturforschung **65a** 613–614 2010
239. Steeb W-H  
Diabolic Points and Entanglement  
Physica Scripta **81** (2010) 025012
238. Steeb W-H  
On two hierarchies of systems of nonlinear differential equations, first integrals, Nambu mechanics and Painlevé property  
International Journal of Geometric Methods in Modern Physics **7**, 405–409 2010

237. Hardy Y and Steeb W-H  
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Unitary Operators, Entanglement, and Gram-Schmidt Orthogonalization  
International Journal of Modern Physics C **20** 891–899 2009
234. Steeb W-H and Hardy Y  
A hierarchy of Hamilton operators and entanglement  
Central European Journal of Physics **7** 854–859 2009 DOI: 10.2478/s11534-009-0075-z
233. Steeb W-H  
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231. Kern A, Heid C, Steeb W-H, Stoop N and Stoop R  
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224. Hardy A and Steeb W-H  
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222. Janse van Rensburg T, van Wyk M A and Steeb W-H  
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Comment on the Shiner-Davison-Landsberg measure  
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Time-Dependent First Integrals, Nonlinear Dynamical Systems, and Numerical Integration  
International Journal of Theoretical Physics **44**, 1619–1622, 2005
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Lie series technique, limit cycle systems and dynamical integration

- Int. J. Mod. Phys. C **15**, 1083–1087, 2004
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