

Wan Ahmad Tajuddin Wan Abdullah
CURRICULUM VITAE

Dilahirkan

8hb Jun 1960 di Terengganu, Malaysia.

Pendidikan Tinggi:

Imperial College of Science and Technology, University of London, UK (1979-1985)

Ijazah Dianugerahkan:

- B.Sc.(Hons) dalam Fizik, University of London (1982)
- Associateship of the Royal College of Science (ARCS) (1982)
- Ph.D. dalam Fizik, University of London (1985)
- Diploma of Imperial College (DIC) (1985)

Kerjaya:

Pensyarah (1985-1992), Profesor Madya (1992-2000), Profesor (2000-kini) di Jabatan Fizik, Universiti Malaya, Kuala Lumpur

Keahlian Badan Profesional:

- Ahli, International Neural Network Society
- Felo, Malaysian Institute of Physics
- Ahli, Artificial Intelligence Society (Malaysia)

Anugerah diterima:

- Biasiswa Kerajaan Malaysia, 1979-1982
- Imperial College Scholarship, 1980 & 1981
- Biasiswa SLAB Universiti Malaya, 1982-1985
- European Communities Fellow, 1991
- Anugerah Saintis Muda Negara, 1995

Penyelidikan dan Penerbitan:

Telah bekerja dalam fizik zarah tenaga tinggi, rangkaian neuron dan sistem kompleks, kepintaran buatan, dan mikroelektronik (Geran penyelidikan Malaysia 04-07-04-41-01, 1991-1995 – *Memodelkan fenomena bioelektrik*; 04-02-03-354, 1996-1999 - *Design and Implementation of Neural Networks and other Cooperative Systems*; 09-02-03-666, 1999-2001 - *Analytical and Computational Studies of Complex Systems*; SAGA 66-02-03-0048, 2005-2006 – *Study of strong nuclear interactions through the measurement of particles produced in (anti)electron-proton collisions at high energies*; Geran Khas Universiti Penyelidikan FR184/2007A, 2007 – *Study of Particle Production in Electron-Proton Collisions at High Energies* (RM110k); UMRG067/09AFR, 2009-2011; Geran Penyelidikan Fundamental (FRGS) FP088/2007A, 2007-2009 - *Study of Particle Production in Electron-Proton Collisions at High Energies* (RM72k); FP005/2010A, 2010-2011

- *Multiquark Hadron Production in High-Energy Particle Collisions* (RM40k); Geran Penyelidikan Tekno TF1008C130, 2009-2012 - Real Time Self-Automated Hardware Implementation of Energy Efficient Green Motion Controller (sub: Field Weakening Controller); geran penyelidikan Suruhanjaya Eropah ITDC'94 #106, 1995-1997 - *Neural Networks on a Parallel Transputer Array for Applications in Logic Programming Implementation and Medical Image Analysis*).

Merupakan kontak Malaysia dalam pakatan antarabangsa fizik zarah tenaga tinggi ZEUS di pemecut HERA di DESY, Hamburg, Jerman.

Telah menerbitkan lebih daripada 200 makalah dalam jurnal, buku, dsb.

Perundingan:

Perunding dalam pengurusan maklumat geografi untuk projek hidroelektrik kepada Tenaga Nasional di Malaysia, dalam pembiayaan projek pengkomputeran berprestasi tinggi kepada Suruhanjaya Eropah di Brussels, dalam pengesanan penipuan bil elektrik menggunakan rangkaian neuron kepada UNITEN, dan dalam sistem analisis untuk kemudahan serakan neutron sudut rendah kepada Agensi Nuklear Malaysia. Anggota pasukan *due diligence* Perbadanan Kemajuan Multimedia (MDC) untuk mengkaji cadangan pembiayaan berkenaan kriptografi kuantum di Los Angeles. Telah menjadi perujuk dan editor untuk jurnal-jurnal profesional dan juga dalam jawatankuasa penasihat persidangan antarabangsa dan kebangsaan.

Pengalaman Mengajar:

Telah mengajar Fizik Moden, Mekanik Kuantum, Mekanik Kuantum Lanjutan, Biofizik, Kaedah Matematik, Kaedah Matematik Lanjutan, Teknik Komputeran, Latihan Terpilih dalam Teknik Komputeran, Elektronik Amali, Mikropemproses dan Mikrokomputer Amali, Elektronik Digital, Getaran dan Gelombang, Fizik Zarah Keunsuran, Fizik Atom dan Molekul, Sistem Kompleks dan Taklinear (BSc dan MSc Fizik); Kepintaran Buatan (BCompSc); Sistem Adaptif, Pengaturcaraan Menggunakan Sistem Adaptif (BSc Bioinformatik).

Telah menyelia berbilang projek penyelidikan bagi ijazah dasar dan pascaijazah. Merangka dan mengimplentasikan sistem pengajaran menerusi Internet untuk program MSc berkursus.

Publications List

(22 Nov 2011)

1. TASSO Collaboration, M. Althoff et al., "Observation of Ξ^- , anti- Ξ^- in e^+e^- Annihilation", *Phys. Lett.* **130B** (1983) 340-344.
[Spires]
2. TASSO Collaboration, M. Althoff et al., "Properties of Charm Jets Produced in e^+e^- Annihilation near 34 GeV", *Phys. Lett.* **135B** (1983) 243-249.
[Spires]
3. TASSO Collaboration, M. Althoff et al., "Observation of F Meson Production in High Energy e^+e^- Annihilation", *Phys. Lett.* **136B** (1983) 130-134.
[Spires]
4. TASSO Collaboration, M. Althoff et al., "An Improved Measurement of Electroweak Couplings from $e^+e^- \rightarrow e^+e^-$ and $e^+e^- \rightarrow \mu^+\mu^-$ ", *Z. Phys. C* **22** (1984) 13-21.
[Spires]
5. TASSO Collaboration, M. Althoff et al., "Observation of Hard Processes in Collisions of Two Quasi-Real Photons", *Phys. Lett.* **138B** (1984) 219-224.
[Spires]
6. TASSO Collaboration, M. Althoff et al., "Experimental Test of the Flavor Independence of the Quark-Gluon Coupling Constant", *Phys. Lett.* **138B** (1984) 317-324.
[Spires]
7. TASSO Collaboration, M. Althoff et al., "Measurement of R and Search for the Top Quark in e^+e^- Annihilation between 39.8 and 45.2 GeV", *Phys. Lett.* **138B** (1984) 441-448.
[Spires]
8. TASSO Collaboration, M. Althoff et al., "Production and Muonic Decay of Heavy Quarks in e^+e^- Annihilation at 34.5 GeV", *Z. Phys. C* **22** (1984) 219-229.
[Spires]
9. TASSO Collaboration, M. Althoff et al., "Jet Production and Fragmentation in e^+e^- Annihilation at 12 - 43 GeV", *Z. Phys. C* **22** (1984) 307-340.
[Spires]
10. TASSO Collaboration, M. Althoff et al., "Evidence for Local Compensation of Baryon Number in e^+e^- Annihilation", *Phys. Lett.* **139B** (1984) 126-132.
[Spires]
11. TASSO Collaboration, M. Althoff et al., "Determination of the τ Lifetime in High Energy e^+e^- Annihilations", *Phys. Lett.* **141B** (1984) 264-270.
[Spires]
12. TASSO Collaboration, M. Althoff et al., "Observation of the Reaction $\gamma \gamma \rightarrow p \text{ anti-}p \pi^+ \pi^-$ ", *Phys. Lett.* **142B** (1984) 135-140.

[Spires]

13. TASSO Collaboration, M. Althoff et al., "Inclusive Electron Production from Heavy Quarks in e^+e^- Annihilations at 34.6 GeV Center of Mass Energy", *Phys. Lett.* **146B** (1984) 443-449.

[Spires]

14. TASSO Collaboration, M. Althoff et al., "Measurement of the Radiative Width of the $\eta'(958)$ in Two-Photon Interactions", *Phys. Lett.* **147B** (1984) 487-492.

[Spires]

15. TASSO Collaboration, M. Althoff et al., "Determination of α_s in First and Second Order QCD from e^+e^- Annihilation into Hadrons", *Z. Phys. C* **26** (1984) 157-174.

[Spires]

16. TASSO Collaboration, M. Althoff et al., "Upper Limits on the Production Rate of the Decuplet Baryons Δ and Σ^* in e^+e^- Annihilation at 34.4 GeV", *Z. Phys. C* **26** (1984) 181-190.

[Spires]

17. TASSO Collaboration, M. Althoff et al., "Photon Pair Production by e^+e^- Annihilation and Search for Supersymmetric Photinos at Energies Greater than 40 GeV", *Z. Phys. C* **26** (1984) 337-342.

[Spires]

18. TASSO Collaboration, M. Althoff et al., "Determination of the Average Lifetime of Bottom Hadrons", *Phys. Lett.* **149B** (1984) 524-532.

[Spires]

19. TASSO Collaboration, M. Althoff et al., "Search for Two-Photon Production of Resonances Decaying into K anti- K and K anti- $K \pi$ ", *Z. Phys. C* **29** (1985) 189-196.

[Spires]

20. TASSO Collaboration, M. Althoff et al., "A Study of 3-Jet Events in e^+e^- Annihilation into Hadrons at 34.6 GeV c.m. Energy", *Z. Phys. C* **29** (1985) 29-40.

[Spires]

21. TASSO Collaboration, M. Althoff et al., "A Detailed Study of Strange Particle Production in e^+e^- Annihilation at High Energy", *Z. Phys. C* **27** (1985) 27-37.

[Spires]

22. TASSO Collaboration, M. Althoff et al., "Particle Correlation Observed in e^+e^- Annihilations into Hadrons at c.m. Energies between 29 and 37 GeV", *Z. Phys. C* **29** (1985) 347-359.

[Spires]

23. TASSO Collaboration, M. Althoff et al., "Bose-Einstein Correlations Observed in e^+e^- Annihilation at a Centre of Mass Energy of 34 GeV", *Z. Phys. C* **30** (1986) 355-369.

[Spires]

24. TASSO Collaboration, M. Althoff et al., "The Production and Decay of Tau Leptons in e^+e^- Annihilations at PETRA Energies", *Z. Phys. C* **26** (1985) 521-530.

[Spires]

25. TASSO Collaboration, M. Althoff et al., "Search for Spinless Bosons in e^+e^- Annihilation", *Phys. Lett.* **154B** (1985) 236-242.

[Spires]

26. TASSO Collaboration, M. Althoff et al., "Vector Meson Production in the Final State $K^+K^-p^+p^-$ of Photon-Photon Collisions", *Z. Phys. C* **32** (1986) 11-19.

[Spires]

27. TASSO Collaboration, M. Althoff et al., "A Measurement of the D^0 Lifetime", *Zeitschrift f. Phys. C* **32** (1986) 343-348.

[Spires]

28. TASSO Collaboration, M. Althoff et al., "Measurement of the Radiative Width of $A_2(1320)$ in Two-Photon Interactions", *Z. Phys. C* **31** (1986) 537-543.

[Spires]

29. TASSO Collaboration, M. Althoff et al., "Measurement of the Photon Structure Function at Q^2 from 7 to 70 (GeV/c) 2 ", *Z. Phys. C* **31** (1986) 527-535.

[Spires]

30. Wan Ahmad Tajuddin Wan Abdullah, "Strange and Multistrange Baryon Production in e^+e^- Annihilation", *PhD Thesis, University of London, 1985; Rutherford Appleton Laboratories Report RAL-T-018, 1985, 250pp.*

[Spires]

31. TASSO Collaboration, M. Althoff et al., "Inclusive π^0 Production By e^+e^- Annihilation At 34.6 GeV Center of Mass Energy", *Deustches Elektronen Synchrotron Report DESY 85-114, 1985, 29pp.*

[Spires]

32. Wan Ahmad Tajuddin Wan Abdullah, "Thoughts on How Humans Think and How Computers Ought", *Proceedings of the ASAIHL Seminar on Information Technology Developments and Their Implications for ASAIHL Institutions, Hong Kong, 1986, pp 471-477.*

33. Wan Ahmad Tajuddin Wan Abdullah, "Fuzziness and Clausal Logic", *Malaysian J. Comput. Sci.* **2** (1986) 17-21.

34. Wan Ahmad Tajuddin Wan Abdullah, "Neural Networks without Long-Range Interactions", *Proceedings of the Regional Conference on Semiconductors and Physics of Materials, Kuala Lumpur, 1987, pp 266-270.*

35. Wan Ahmad Tajuddin Wan Abdullah, "Computations with Neural Networks and Neural-Network-Like Structures", in J. Noye & C. Fletcher (eds.), *Computational Techniques and Applications: CTAC-87*, Elsevier, 1988, pp 669-673.

36. Azman Hussin & Wan Ahmad Tajuddin Wan Abdullah, "Merangka Komputer yang Berfikir Seperti Manusia", *Proceedings, Siri Seminar Sains Komputer II: Inovasi Komputer di Malaysia, Bangi, April 1988.*

37. Wan Ahmad Tajuddin Wan Abdullah, "Santaisme", *Dewan Budaya* **10(5)** (1988) 20.

38. Wan Ahmad Tajuddin Wan Abdullah, "Biconditionality, Analogy, Induction and Predicate Logic", *Malaysian J. Comput. Sci.* **3** (1987) 21-28.
39. Wan Ahmad Tajuddin Wan Abdullah, "Dendritic Trees and Non-Quadratic Combinatorial Optimisation", *J. Sains Malaysia* **9** (1987) 105-109.
40. Wan Ahmad Tajuddin Wan Abdullah, Chu Yang Tong & Cheah Boon Kiat, "A Complete Survey of the Energy Landscape of a Neural Network", *J. Fizik Malaysia* **9** (1988) 50-52.
41. Wan Ahmad Tajuddin Wan Abdullah, "Biologic", *Cybernetica* **31** (1988) 245-251.
[CAT.INIST]
42. Wan Ahmad Tajuddin Wan Abdullah,
"Pengoptimuman Menggunakan Rangkaian Neuron Multitersambung" *Physics Dept Report UMKL-89-04*, 1989.
43. Wan Ahmad Tajuddin Wan Abdullah, "Charge carriers on a 2-dimensional square lattice with antiferromagnetic Ising spins", *Proc. Seminar Fizik Keadaan Pepejal ke-V, Skudai, 1988*, pp. 160-164.
44. Wan Ahmad Tajuddin Wan Abdullah, "Memodel otak", *Proc. National Physics Symposium, Kuala Lumpur, 1988*.
45. Wan Ahmad Tajuddin Wan Abdullah, "Tali temali dalam fizik zarah unsur", *Proc. National Physics Symposium, Kuala Lumpur, 1988*.
46. Wan Ahmad Tajuddin Wan Abdullah, "The Connectionist Paradigm", *Proc. 1st National Computer Science Conference, Kuala Lumpur, January 1989*, pp. 95-119.
47. W. A. T. Wan Abdullah, "Connectionist Architectures for Triggering and Track Reconstruction", *Comput. Phys. Commun.* **57** (1989) 472-475.
[Spires]
48. Wan Ahmad Tajuddin Wan Abdullah, "Cross-Correlated Memories in Completely-Connected Networks", *Intern. J. Pattern Recognition & Artificial Intelligence* **4(1)** (1990) 113-121.
49. Wan Ahmad Tajuddin Wan Abdullah, "Surface Analysis of *Escherichia Coli* Using Charge Measurements", *J. Sains Malaysia* **12** (1990) 21 (with Zawajer Abdul Ghani & Raja Shuib Raja Hassan)
50. Wan Ahmad Tajuddin Wan Abdullah, "Persistence of Memory", *J. Sains Malaysia* **12** (1990) 101.
51. Wan Ahmad Tajuddin Wan Abdullah, "Artificial Intelligence from Neural Networks", *Physics Dept Report UMKL-89-10*, 1989.
52. Wan Ahmad Tajuddin Wan Abdullah, "Logic Programming on a Neural Network", *J. of Intelligent Systems* **7** (1992) 513.
53. Wan Ahmad Tajuddin Wan Abdullah, "A Connectionist Epistemology", *Cybernetica* **34** (1991) 75.
54. Wan Ahmad Tajuddin Wan Abdullah, "Kekaitan dan Sains sebagai Korelasi", *Kasturi*, submitted.

55. Wan Ahmad Tajuddin Wan Abdullah, "Al-Ghazali and Connectionism", *MAAS J. Islamic Sci.*, submitted.
 56. Wan Ahmad Tajuddin Wan Abdullah, "Introduction to Neural Networks", *Proc. Seminar Sehari Fizik Teori UKM, Bangi, Dec. 1990*, to appear.
 57. Wan Ahmad Tajuddin Wan Abdullah, "The Logic of Neural Networks", *Phys. Lett.* **176A** (1993) 202.
 58. Wan Ahmad Tajuddin Wan Abdullah, "Studies in Reconstructing Circular Tracks Using Neural Networks", in Y. Watase & F. Abe (eds.), *Computing in High Energy Physics '91*, University Academic Press, Tokyo, 1991, pp. 255-259.
 59. Khalid Md Nor & Wan Ahmad Tajuddin Wan Abdullah, "Fuzzy and Crisp Random Graphs and Their Applications to Neural Nets", *Proc. 1st Natl. Conf. on Artif. Intell. Technol. and Applic., Kuala Lumpur 1991*, pp.114-121.
 60. Wan Ahmad Tajuddin Wan Abdullah, "Neural Network Logic", in O. Benhar, C. Bosio, P. del Giudice & E. Tabet (eds.), *Neural Networks: From Biology to High Energy Physics*, ETS Editrice, Pisa, 1991, pp. 135-142.
 61. Wan Ahmad Tajuddin Wan Abdullah, "Looking for the Global Minimum in a Symmetric Neural Network", presented at Conf. on Complex Systems, Trieste, Italy, 1991.
 62. Wan Ahmad Tajuddin Wan Abdullah, "Neural Networks, Logic Programming and Al-Ghazali's Epistemology", *Proc. AMR-IT '91, Leicester, U. K., 1991*.
 63. W. A. T. Wan Abdullah, "A Two-Tier Neural Network for b-Tagging", *Proc. 5th Asia-Pacific Phys. Conf., Kuala Lumpur, 1992* (ed. Chia et al.), World Scientific, Singapore, 1994, pp. 435-438.
- [Spires]
64. Wan Ahmad Tajuddin Wan Abdullah, "Seeking Global Minima", *J. Comput. Phys.* **110(2)** (1994) 320.
- [ACM Portal]
65. Wan Ahmad Tajuddin Wan Abdullah,
"Suatu Tinjauan Beberapa Perkembangan Terbaharu dalam Fizik", presented at Bengkel Guru-guru Fizik 1/93, IFM, Batu Pahat, 1993.
 66. Wan Ahmad Tajuddin Wan Abdullah, "Information and Knowledge in a Neural Network", presented at Persidangan Fizik Kebangsaan 1993, Kuala Lumpur, Sept. 1993.
 67. Wan Ahmad Tajuddin Wan Abdullah,
"Pengaturcaraan Logik Menggunakan Rangkaian Neuron", *Pros. Seminar Sains Komputer UPM, 14 Jun 1994*, pp. 140-145.
 68. Wan Ahmad Tajuddin Wan Abdullah, "Logic in Neural Networks", presented at Research Colloq. on Neural Systems, Kuala Lumpur, July 1994; *Malaysian J. Comput. Sci.* **9(1)** (1996) 1-5 (as "Logic Programming in Neural Networks")
- [Mal J Comput_Sci]

69. Khalid Md Nor , Wan Ahmad Tajuddin Wan Abdullah & Harith Ahmad, "A Non-Weight Approach to Neural Networks", presented at Research Colloq. on Neural Systems, Kuala Lumpur, July 1994; *Malaysian J.Comput. Sci.*, to appear.
70. Wan Ahmad Tajuddin Wan Abdullah, "The Optimum Number of Sexes", *Pros. Persidangan Fizik Kebangsaan 1994, Kuala Lumpur, Sept. 1994*, to appear.
71. W. A. T. Wan Abdullah, "Understanding Event Classification by Multilayer Perceptrons", in B. Denby & D. Perret-Gallix (eds.), *New Computing Techniques in Physics Research IV*, World Scientific, Singapore, 1995, pp 571-575.
[Spires]
72. W. A. T. Wan Abdullah, "Structured Feedforward Neural Networks for Trackfinding", in B. Denby & D. Perret-Gallix (eds.), *New Computing Techniques in Physics Research IV*, World Scientific, Singapore, 1995, pp 565-570.
[Spires]
73. W. A. T. Wan Abdullah, R. Mahat & Y. M. Amin, "Track Classification and Enumeration in Solid State Nuclear Track Detectors Using Cellular Automata", in B. Denby & D. Perret-Gallix (eds.), *New Computing Techniques in Physics Research IV*, World Scientific, Singapore, 1995, pp 577-582.
[Spires]
74. Wan Ahmad Tajuddin Wan Abdullah,
"Maklumat dan Pengetahuan dalam Rangkaian Neuron", *J. Info. Sci.*, to appear.
75. Wan Ahmad Tajuddin Wan Abdullah, "Kecerdasan Buatan Kecerdasan", *J. Info. Sci.*, to appear.
76. Wan Ahmad Tajuddin Wan Abdullah, "A Theory of Knowledge", *Pros. Persidangan Fizik Kebangsaan 1995, Serdang, 1995* (ed. Z. A. Sulaiman et al.), pp. 227-230.
77. Wan Ahmad Tajuddin Wan Abdullah, "Lawatan Lain", *Dewan Bahasa & Pustaka*, Kuala Lumpur 1995 (ISBN: 983-62-4770-X).
78. Wan Ahmad Tajuddin Wan Abdullah, "Jalinan Juzuk-juzuk Jirim", *Dewan Kosmik*, Jan. 1996.
[HTML]
79. Wan Ahmad Tajuddin Wan Abdullah, "Kisah dari Kerdipan-kerdipan di Kosmos", *Dewan Kosmik*, Feb. 1996.
80. Wan Ahmad Tajuddin Wan Abdullah, "Lalu Laju-laju", *Dewan Kosmik*, Mar. 1996.
81. Wan Ahmad Tajuddin Wan Abdullah, "Mengukur Makna Medan", *Dewan Kosmik*, Apr. 1996.
82. Wan Ahmad Tajuddin Wan Abdullah, "Nasabah: Nalar dan Nanar", *Dewan Kosmik*, May 1996.
83. Wan Ahmad Tajuddin Wan Abdullah, "Organisasi Otak dan Organisme", *Dewan Kosmik*, June 1996.
84. Wan Ahmad Tajuddin Wan Abdullah, "Perihal Pancaran Pekerma", *Dewan Kosmik*, July 1996.

85. Wan Ahmad Tajuddin Wan Abdullah, "Qasidah Qadar yang Qadim?", *Dewan Kosmik*, Aug. 1996.
86. Wan Ahmad Tajuddin Wan Abdullah, "Ruang Reyok atau Rekahan?", *Dewan Kosmik*, Sept. 1996.
87. Wan Ahmad Tajuddin Wan Abdullah, "Sintaks Sebagai Senibina", *Dewan Kosmik*, Oct. 1996.
88. Wan Ahmad Tajuddin Wan Abdullah, "Talian Telekomunikasi Terkini", *Dewan Kosmik*, Nov. 1996.
89. Wan Ahmad Tajuddin Wan Abdullah, "Mating Frequency, Lifespan and Fitness", *Pros. Persidangan Fizik Kebangsaan 1996, Penang, 1996* (ed. A. A. Tajuddin et al.), pp 25-33.
90. Wan Ahmad Tajuddin Wan Abdullah, "Sains Celaru dan Sastera", presented at Dewan Bahasa & Pustaka, Kuala Lumpur, Dec. 1996.
[Amipro (726 kb)]
91. Wan Ahmad Tajuddin Wan Abdullah, "Umpama Unggunan Usali", *Dewan Kosmik*, Dec. 1996.
92. Wan Ahmad Tajuddin Wan Abdullah, "Verifikasi Variasi Versi", *Dewan Kosmik*, Jan. 1997.
[HTML]
93. Wan Ahmad Tajuddin Wan Abdullah, "Wawasan Warkah Warisan", *Dewan Kosmik*, Feb. 1997.
94. Wan Ahmad Tajuddin Wan Abdullah, "Selamat Datang ke Siberpuisi", *Dewan Sastera* **27(5)** (1997) 44.
95. H. Fares & W. A. T. Wan Abdullah, "Neural Networks in Quantum Gravity", in S. C. Lim, R. Abd-Shukor & K. H. Kwek (eds.), *Frontiers in Quantum Physics*, Springer, Singapore, 1998, pp 319-324.
[Spire]
96. Karim Yaacob & Wan Ahmad Tajuddin Wan Abdullah, "Some New Developments in Structural Theory", in S. C. Lim, R. Abd-Shukor & K. H. Kwek (eds.), *Frontiers in Quantum Physics*, Springer, Singapore, 1998, pp 343-349.
97. W. A. T. Wan Abdullah, N. Selvanathan, Y. W. Lau, T. Chong & Z. A. Ibrahim, "Neural Networks on a Parallel Transputer Array for Applications in Logic Programming Implementation and Medical Image Analysis", presented at EUROPAR'97, Passau, August 1997.
98. Wan Ahmad Tajuddin Wan Abdullah, "Fizik dalam Teori: Teori dalam Fizik", presented at Seminar Perbandingan Teori DBP, Melaka, 4-6 September 1997.
99. Wan Ahmad Tajuddin Wan Abdullah, "Introduction to Neural Network Techniques (with special reference to chemistry)", presented at Training Course on Industrial Applications of Structure-Based Molecular Design and Combinatorial Chemistry, Kuala Lumpur, 1997.
[Latex (23 kb)] [Postscript (97 kb)]

100. Wan Ahmad Tajuddin Wan Abdullah, "Logic in Hopfield Networks without Higher-Order Connections", *Proc. Int. Conf. Neural Information Processing, Dunedin, NZ, Nov. 1997 (Addendum Volume)*.
[MSWord (31 kb)]
101. S. Faycal, W. A. T. Wan Abdullah, Z. A. Ibrahim & A. Iftexhar, "Parallel Learning-Processing Strategy for Artificial Neural Network Implementation", *Science International* **10(3)** (1998).
102. Wan Ahmad Tajuddin Wan Abdullah, "Wan Ahmad Tajuddin Wan Abdullah, "Simplifying Complexity", *Proc. Int. Meeting on Frontiers of Physics 1998, Kuala Lumpur 26-29 Oct. 1998*, ed. S. P. Chia & D. A. Bradley, World Scientific, Singapore, 2000, pp 612-616.
103. Ng Tien Khuan & Wan Ahmad Tajuddin Wan Abdullah, "Cellular Automata Studies of the Prisoners' Dilemma", *Proc. Int. Meeting on Frontiers of Physics 1998, Kuala Lumpur 26-29 Oct. 1998*, ed. S. P. Chia & D. A. Bradley, World Scientific, Singapore, 2000, pp 628-631.
104. Wan Ahmad Tajuddin Wan Abdullah, "Otak Kah Tak?", *PSI* **2** (1999) 9.
105. Wan Ahmad Tajuddin Wan Abdullah, "Dari Ruang Pengalaman ke Ruang Bahasa ke Ruang Siber", presented at Seminar Antarabangsa Kesusasteraan Melayu, Kuala Lumpur, Sept. 1999.
106. Wan Ahmad Tajuddin Wan Abdullah, "Logic in Symmetric Neural Networks without Multiconnections", *J. Intell. Syst.*, submitted.
[HTML]
107. Wan Ahmad Tajuddin Wan Abdullah, "Extracting Knowledge from Hopfield Neural Networks", *J. Intell. Syst.*, submitted.
[MSWord (26 kb)]
108. Wan Ahmad Tajuddin Wan Abdullah, "A Scalable Architecture for Densely-Connected Digital Neural Networks", *Malaysian J. Sci.*, submitted.
[Amipro (20 kb)]
109. Wan Ahmad Tajuddin Wan Abdullah, "Building a Two-Bit Processor", *Malaysian J. Sci.*, submitted.
[HTML]
110. Wan Ahmad Tajuddin Wan Abdullah, "Fizik dalam Malaysia dan Malaysia dalam Fizik", *Pros. FIZIK 2000: Seminar Fizik Kebangsaan*, ed. Hariyadi Soeterdjo et al., UMS, Kota Kinabalu, pp 293-300.
111. Wan Ahmad Tajuddin Wan Abdullah, "Revolusi dan Reformasi dalam Model Sistem Sosial", *Pros. FIZIK 2000: Seminar Fizik Kebangsaan*, ed. Hariyadi Soeterdjo et al., UMS, Kota Kinabalu, pp 290-292.
112. Wan Ahmad Tajuddin Wan Abdullah, "Sibersosiologi Puisi", presented at Hari Pusi Nasional 2000, Langkawi, 3-6 Nov. 2000.
[HTML]

113. Wan Ahmad Tajuddin Wan Abdullah, "Kajian terhadap Puisi Siber: suatu Pengenalan Awal", presented at Seminar Sastera Siber KALAM, DBP, Kuala Lumpur, 14 April 2001.
[HTML]
114. Wan Ahmad Tajuddin Wan Abdullah, "Bidang-bidang keutamaan dalam Fizik 2001", presented at Seminar on Priority Setting in Basic Sciences, Melaka, January 2001.
[HTML]
115. Wan Ahmad Tajuddin Wan Abdullah, "Learning strategies for global games with delayed payoffs", presented at Workshop on Economics with Heterogeneous Interacting Agents WEHIA 2002, Trieste, Italy, May-June 2002; in Mauro Gallegati, Alan P. Kirman & Matteo Marsili (eds.), *The Complex Dynamics of Economic Interaction. Essays in Economics and Econophysics*, Springer, pp. 395-402.
[arXiv:cond-mat/0210659] [pdf (160 kb)]
116. Wan Ahmad Tajuddin Wan Abdullah, "Emergence of heterogeneity in an agent-based model", *Physica A* **324** (2003) 311-316.
[pdf (159 kb)]
117. Wan Ahmad Tajuddin Wan Abdullah, "Teori kinetik untuk ekonomi", presented at ITMA, UPM, Serdang, 8 Nov. 2002; *Dept of Physics Univ. Malaya preprint JFUM/2002/001*.
[arXiv:cond-mat/0211526] [pdf (197 kb)]
118. Wan Ahmad Tajuddin Wan Abdullah, "Ekonomi Mainan", presented at PERFIK 2002, Kuala Lumpur, 21-22 Dec 2002.
119. A. K. M. Azhar, W. A. T. Wan Abdullah, Z. A. Kidam & A. Salleh, "The Deviants' Dilemma: A Simple Game in the Run-Up to Seniority", presented at the 8th Annual Workshop on Economics with Heterogeneous Interacting Agents (WEHIA 2003), Kiel, Germany, 29-31 May 2003; *GSM Discussion Paper 01/03* (Univ. Putra Malaysia); *Dept of Physics Univ. Malaya preprint JFUM/2003/001*.
[arXiv:cond-mat/0310340] [pdf (197 kb)]
120. Wan Ahmad Tajuddin Wan Abdullah, "Ayat Alam", invited address, Program Penggalakan Sains dan Teknologi Zon Timur 2003, Kuala Terengganu, 13 Oct. 2003.
[MSWord (74 kb)]
121. Wan Ahmad Tajuddin Wan Abdullah & P. Wills, "Automaton Molekulan", presented at Persidangan Fizik Kebangsaan (PERFIK 2003), Bukit Frasier, August 2003.
122. Wan Ahmad Tajuddin Wan Abdullah (with A. K. M. Azhar & M. Ruzlan), "Homogeneity and Heterogeneity in General Equilibrium Modelling of Economics: Some Analytical Comparisons", presented at Conference on Advances in Theoretical Sciences, Putrajaya, 20-21 May 2003.
123. Wan Ahmad Tajuddin Wan Abdullah & A. K. M. Azhar, "Deviants' Dilemma – The Simulation", presented at the 9th Workshop on Economics with Heterogeneous Interacting Agents (WEHIA 2004), Kyoto, Japan, 27-29 May 2004.

[[arXiv:cond-mat/0412107](#)] [[pdf](#) (151 kb)]

124. Wan Ahmad Tajuddin Wan Abdullah, "Love before Sex", presented at Persidangan Fizik Kebangsaan (PERFIK 2004), Kuala Lumpur, 5-7 Oct 2004.

[[arXiv:q-bio/0412030](#)] [[pdf](#) (298 kb)]

125. Kuek Chian Shiun, Wan Ahmad Tajuddin Wan Abdullah & Burhanuddin Kamaluddin, "Digital Hardware Implementation of Bus-based, Field-Ordered Hopfield Network using VHDL", presented at 2004 IEEE International Conference on Semiconductor Electronics (ICSE2004), Kuala Lumpur, 7-9 Dec. 2004.

[[pdf](#) (225 kb)] [[IEEE Xplore](#)]

126. Wan Ahmad Tajuddin Wan Abdullah & A. K. M. Azhar, "Mutual Support in Agent Networks", presented at the Int. Meeting on Frontiers of Physics 2005, Kuala Lumpur, 25-29 July 2005.

[[arXiv:physics/0508205](#)] [[pdf](#) (171 kb)]

127. A.K.M. Azhar, WAT Wan Abdullah & M. Ruzlan, "Dynamic Phase Structures in the Evolution of Conventions", presented at IATC (CATS), Putrajaya, Malaysia, 6-8 December 2005.

128. Saratha Sathasivam & Wan Ahmad Tajuddin Wan Abdullah, "Logic Mining Using Neural Networks", *Proceedings of the International Conference on Intelligent Systems 2005 (ICIS 2005)*, Kuala Lumpur, 1-3 December 2005.

[[pdf](#) (135 kb)] [[arXiv:0804.4071](#)]

129. Saratha Sathasivam & Wan Ahmad Tajuddin Wan Abdullah, "Logical Rules Induction", *Proceedings of the 2nd IMT-GT Regional Conference on Mathematics, Statistics and Applications*, Penang, 13-15 June 2006.

[[pdf](#) (64 kb)]

130. ZEUS Collaboration, S. Chekanov et al., "Measurement of high- Q^2 deep inelastic scattering cross sections with a longitudinally polarised positron beam at HERA", *Phys. Lett. B* **637** (2006) 210-222.

[[Spires](#)] [[arXiv:hep-ex/0602026](#)]

131. ZEUS Collaboration, S. Chekanov et al., "Event shapes in deep inelastic scattering at HERA", *Nucl. Phys. B* **767** (2007) 1-28.

[[Spires](#)] [[arXiv:hep-ex/0604032](#)]

132. Wan Ahmad Tajuddin Wan Abdullah, "8 Puisi Bebas Ruang", part of *Dua Kumpulan Puisi. 8 Puisi Bebas Ruang*, Wan Ahmad Tajuddin Wan Abdullah. *8 Sajak Budak Tepi Sungai*, Leo A. W. S., Pustaka Dewan Puisi, Kota Bharu, 2006 (ISBN: 983-2771-07-2).

133. ZEUS Collaboration, S. Chekanov et al., "Measurement of neutral current cross sections at high Bjorken- x with the ZEUS detector at HERA", *Eur. Phys. J. C* **49** (2007) 523-544.

[[Spires](#)] [[arXiv:hep-ex/0608014](#)]

134. ZEUS Collaboration, S. Chekanov et al., "Measurement of prompt photons with associated jets in photoproduction at HERA", *Eur. Phys. J. C* **49** (2007) 511-522.

- [Spires] [arXiv:hep-ex/0608028]
135. ZEUS Collaboration, S. Chekanov et al., "Inclusive-jet and dijet cross-sections in deep inelastic scattering at HERA", *Nucl. Phys. B* **765** (2007) 1-30.
[Spires] [arXiv:hep-ex/0608048]
136. ZEUS Collaboration, S. Chekanov et al., "Measurement of azimuthal asymmetries in neutral current deep inelastic scattering at HERA", *Eur. Phys. J. C* **51** (2007) 289-299.
[Spires] [arXiv:hep-ex/0608053]
137. ZEUS Collaboration, S. Chekanov et al., "Search for stop production in R -parity-violating supersymmetry at HERA", *Eur. Phys. J. C* **50** (2007) 269-281.
138. ZEUS Collaboration, S. Chekanov et al., "Measurement of open beauty production at HERA in the D^* muon final state", *Eur. Phys. J. C* **50** (2007) 299-314.
[Spires] [arXiv:hep-ex/0609050]
139. ZEUS Collaboration, S. Chekanov et al., "Photoproduction of events with rapidity gaps between jets at HERA", *Eur. Phys. J. C* **50** (2007) 283-297.
[Spires] [arXiv:hep-ex/0612008]
140. ZEUS Collaboration, S. Chekanov et al., "Measurement of production at HERA", *Eur. Phys. J. C* **51** (2007) 1-23.
[Spires] [arXiv:hep-ex/0612023]
141. ZEUS Collaboration, S. Chekanov et al., "Jet-radius dependence of inclusive-jet cross-sections in deep inelastic scattering at HERA", *Phys. Lett. B* **649** (2007) 12-24.
[Spires] [arXiv:hep-ex/0701039]
142. ZEUS Collaboration, S. Chekanov et al., "Leading neutron energy and p_T distributions in deep inelastic scattering and photoproduction at HERA", *Nucl. Phys. B* **776** (2007) 1-37.
[Spires] [arXiv:hep-ex/0702028]
143. ZEUS Collaboration, S. Chekanov et al., "Measurement of D^{*+} meson production in e^+p scattering at low Q^2 ", *Phys. Lett. B* **649** (2007) 111-121.
[Spires] [arXiv:hep-ex/0702034]
144. ZEUS Collaboration, S. Chekanov et al., "Diffractive photoproduction of D^{*+} (2010) at HERA", *Eur. Phys. J. C* **51** (2007) 301-315.
[Spires] [arXiv:hep-ex/0703046]
145. Wan Ahmad Tajuddin Wan Abdullah, "Bahasa Sains, Bangsa Sains, Jiwa Sains", presented at *Seminar Bahasa dan Sastra MASTERA*, Kuala Lumpur, Mac 2007.
[pdf (96 kb)]
146. ZEUS Collaboration, S. Chekanov et al., "Measurement of D mesons production in deep inelastic scattering at HERA", *JHEP* **07** (2007) 074.
[Spires] [arXiv:0704.3562]
147. ZEUS Collaboration, S. Chekanov et al., "Multijet production at low x_{Bj} in deep inelastic scattering at HERA", *Nucl. Phys. B* **786** (2007) 152-180.

- [Spires] [arXiv:0705.1931]
148. ZEUS Collaboration, S. Chekanov et al., "Measurement of (anti)deuteron and (anti)proton production in DIS at HERA", *Nucl. Phys. B* **786** (2007) 181-205.
[Spires] [arXiv:0705.3770]
 149. ZEUS Collaboration, S. Chekanov et al., "Bose-Einstein Correlations of Charged and Neutral Kaons in Deep Inelastic Scattering at HERA", *Phys. Lett. B* **652** (2007) 1-12.
[Spires] [arXiv:0706.2538]
 150. ZEUS Collaboration, S. Chekanov et al., "High- E_T dijet photoproduction at HERA", *Phys. Rev. D* **76** (2007) 072011.
[Spires] [arXiv:0706.3809]
 151. ZEUS Collaboration, S. Chekanov et al., "Forward-jet production in deep inelastic ep scattering at HERA", *Eur. Phys. J. C* **52** (2007) 515-530.
[Spires] [arXiv:0707.3093]
 152. ZEUS Collaboration, S. Chekanov et al., "Three- and four-jet final states in photoproduction at HERA", *Nucl. Phys. B* **792** (2008) 1-47.
[Spires] [arXiv:0707.3749]
 153. ZEUS Collaboration, S. Chekanov et al., "Dijet production in diffractive deep inelastic scattering at HERA", *Eur. Phys. J. C* **52** (2007) 813-832.
[Spires] [arXiv:0708.1415]
 154. ZEUS Collaboration, S. Chekanov et al., "Exclusive production in deep inelastic scattering at HERA", *PMC Phys. A* **1** (2007) 6.
[Spires] [arXiv:0708.1478]
 155. Wan Ahmad Tajuddin Wan Abdullah & Sidiq Mohamad Khidzir, "Kinetic economies", presented at 10th Asia-Pacific Physics Conference, Pohang, South Korea, August 2007.
[arXiv:0710.1139]
 156. ZEUS Collaboration, S. Chekanov et al., "Diffractive Photoproduction of Dijets in ep Collisions at HERA", *Eur. Phys. J. C*, to appear.
 157. Wan Ahmad Tajuddin Wan Abdullah, "Pengalaman dengan pelaksanaan program sarjana dalam talian", *Pros. Persidangan Teknologi Pendidikan, Langkawi, September 2006*, to appear
[rtf (14.5 Mb)]
 158. Hedieh Monajemi, Wan Ahmad Tajuddin Wan Abdullah & Sharifuddin M Zain, "Ab-initio and modelling study of some amino acid-tRNA: NMR shielding and thermodynamic of solvent effect", presented at 6th International Congress on Industrial and Applied Mathematics (ICIAM 07), Zurich, Switzerland, 16-20 July 2007; *Proc. Appl. Math. Mech.* **7** (2007) 2150041-2150042.
 159. P. F. Lee, Misni Misran & W. A. T. Wan Abdullah, "Effects on Electrophoretic Mobility of different R values Microemulsion to form Titanium Dioxide (TiO₂)", presented at 12th Asian Chemical Congress (12ACC), Kuala Lumpur, 23-25 August 2007.

160. Hedieh Monajemi, Wan Ahmad Tajuddin Wan Abdullah & Sharifuddin M Zain, "Monte Carlo Simulation for Detecting the Influence of Temperature on Vinblastine", presented at 3rd *Global Summit on Medicinal and Aromatic Plants (GOSMAP-3)*, Chiang Mai, Thailand, 21-24 November 2007.
161. Wan Ahmad Tajuddin Wan Abdullah, "Landscapes of the Brain and Mind", presented at 3rd *Mathematics & Physical Science Graduate Congress, Kuala Lumpur*, 12-14 December 2007.
162. Wan Ahmad Tajuddin Wan Abdullah & Sidiq Mohamed Khidzir, "Kinetic Economies", presented at 3rd *Mathematics & Physical Science Graduate Congress, Kuala Lumpur*, 12-14 December 2007.
163. Faridah Mohamad Idris, Wan Ahmad Tajuddin Wan Abdullah, Antje Huettmann & Ingrid Maria Gregor, "Halomuons in the ZEUS detector", presented at 3rd *Mathematics & Physical Science Graduate Congress, Kuala Lumpur*, 12-14 December 2007.
164. Wan Ahmad Tajuddin Wan Abdullah, "Jirim Kuark: Mikroskopi Elektron Attoskala Ke Atas Proton", invited plenary address, *National Physics Conference 2007 (PERFIK 2007)*, Kuala Terengganu, Malaysia, 26-28 December 2007; "Quark Matter – Attoscale Electron Microscopy of the Proton", in H. B. Senin, G. Carini, J. Abdullah & D. A. Bradley (eds.), CP1017, *Current Issues of Physics in Malaysia*, American Institute of Physics, Melville, NY, 2008, pp. 10-17.
165. Hedieh Monajemi, Wan Ahmad Tajuddin Wan Abdullah & Sharifuddin M Zain, "Ab-initio study of solvated methionine-tRNA^{met} and alanine-tRNA^{ala} molecules", presented at *National Physics Conference 2007 (PERFIK 2007)*, Kuala Terengganu, Malaysia, 26-28 December 2007; in H. B. Senin, G. Carini, J. Abdullah & D. A. Bradley (eds.), CP1017, *Current Issues of Physics in Malaysia*, American Institute of Physics, Melville, NY, 2008, pp. 373-377.
166. Sidiq Mohamed Khidzir & Wan Ahmad Tajuddin Wan Abdullah, "On the Wealth Distribution of a Simulated Kinetic Economy with an Arbitrary Fraction of Agents Networking Trading Opportunities", presented at *National Physics Conference 2007 (PERFIK 2007)*, Kuala Terengganu, Malaysia, 26-28 December 2007; in H. B. Senin, G. Carini, J. Abdullah & D. A. Bradley (eds.), CP1017, *Current Issues of Physics in Malaysia*, American Institute of Physics, Melville, NY, 2008, pp. 383-387.
167. P. F. Lee, Misni Misran & W. A. T. Wan Abdullah, "Comparison of the Surface Charge between Liposome and TiO₂", presented at *National Physics Conference 2007 (PERFIK 2007)*, Kuala Terengganu, Malaysia, 26-28 December 2007.
168. Faridah Mohamad Idris et al., "Neutron Detection at Low and High Energies", presented at *National Physics Conference 2007 (PERFIK 2007)*, Kuala Terengganu, Malaysia, 26-28 December 2007.
[MSWord (287 kb)]
169. Saratha Sathasivam & Wan Ahmad Tajuddin Wan Abdullah, "Flatness of the Energy Landscape for Horn Clauses Logic", *Matematika* **23** (2007) 147-156.
[pdf (181 kb)] [[arXiv:0805.0197](https://arxiv.org/abs/0805.0197)] [*Matematika*]

170. P. F. Lee, W. A. T. Wan Abdullah & Misni Misran, "Surface Charge Comparison of Liposome and TiO_2 ", *Indian J. Biochem.*, in press.
[pdf (231 kb)]
171. Saratha Sathasivam & Wan Ahmad Tajuddin Wan Abdullah, "Logic Learning in Hopfield Networks", *Mod. Appl. Sci.* **2** (2008) 57-63.
[MSWord (181 kb)] [arXiv:0804.4075] [Mod Appl Sci]
172. ZEUS Collaboration, S. Chekanov et al., "Deep inelastic inclusive and diffractive scattering at Q^2 values from 25 to 320 GeV^2 with the ZEUS forward plug calorimeter", *Nucl. Phys. B* **800** (2008) 1-76.
173. ZEUS Collaboration, S. Chekanov et al., "Multijet cross sections in charged current e^+p scattering at HERA", *Phys.Rev. D* **78** (2008) 032004.
[Spire] [Phys Rev D]
174. ZEUS Collaboration, S. Chekanov et al., "Energy dependence of the charged multiplicity in deep inelastic scattering at HERA", *JHEP* **06** (2008) 061.
175. ZEUS Collaboration, S. Chekanov et al., "Beauty photoproduction using decays into electrons at HERA", *Phys.Rev. D* **78** (2008) 072001.
176. ZEUS Collaboration, S. Chekanov et al., " $K_S^0 K_S^0$ resonance production in ep collisions at HERA", *Phys. Rev. Lett.* **101** (2008) 11203.
177. A. Neyamadpour, S. Taib & W. A. T. Abdullah, "Inversion of 2D DC resistivity data for high resistivity contrast regions using artificial neural network", presented at *WSEAS Int. Conf. Engineering Mechanics, Structures, and Engineering Geology, Heraklion, Greece 22-24 July 2008*; in M. K. Nikolinakou, G. Tsekouras, V. Gekas & D. Pavlou (eds.), *New Aspects of Engineering Mechanics, Structures, Engineering Geology*, World Sci. Eng. Acad. Soc., Athens, Greece, 2008, pp. 186-194.
178. Anuar Alias, Ithnin Abdul Jalil, W. A. Tajuddin, "Stress Energy Tensor Derivation of Slowly Rotating Wormhole in a Braneworld", *Proc 4th IMT-GT Conf Math, Stat Applic (IMSA), Bandar Aceh, Indonesia, 2008*.
179. ZEUS Collaboration, S. Chekanov et al., "Search for events with an isolated lepton and missing transverse momentum and a measurement of W production at HERA", *Phys. Lett. B* **672** (2009) 106-115.
180. ZEUS Collaboration, S. Chekanov et al., "Production of excited charm and charm-strange mesons at HERA", *Eur. Phys. J. C* **60** (2009) 25-42.
181. ZEUS Collaboration, S. Chekanov et al., "Angular correlations in three-jet events in ep collisions at HERA", *Eur. Phys. J. D*, to appear.
182. ZEUS Collaboration, S. Chekanov et al., "Measurement of beauty production from dimuon events at HERA", *JHEP* **02** (2009) 032.
183. ZEUS Collaboration, S. Chekanov et al., "A Measurement of the Q^2 , W and t Dependences of Deeply Virtual Compton Scattering at HERA", *JHEP* **05** (2009) 108.
184. ZEUS Collaboration, S. Chekanov et al., "Deep Inelastic Scattering with Leading Protons or Large Rapidity Gaps at HERA", *Nucl. Phys. B* **816** (2009) 1-61.

185. ZEUS Collaboration, S. Chekanov et al., "Leading Proton Production in Deep Inelastic Scattering at HERA", *JHEP* **06** (2009) 074.
186. ZEUS Collaboration, S. Chekanov et al., "Measurement of Charged Current Deep Inelastic Scattering Cross Sections with a Longitudinally Polarised Electron Beam at HERA", *Eur. Phys. J. C* **61** (2009) 223-235.
187. ZEUS Collaboration, S. Chekanov et al., "Subjet Distributions in Deep Inelastic Scattering at HERA", *Eur. Phys. J. C* **63** (2009) 527-548.
188. ZEUS Collaboration, S. Chekanov et al., "Measurement of D^\pm and D^0 Production in Deep Inelastic Scattering Using a Lifetime Tag at HERA", *Eur. Phys. J. C* **63** (2009) 171-188.
189. ZEUS Collaboration, S. Chekanov et al., "Measurement of High- Q^2 Neutral Current Deep Inelastic e^- Scattering Cross Sections with a Longitudinally Polarised Electron Beam at HERA", *Eur. Phys. J. C* **62** (2009) 625-658.
190. ZEUS Collaboration, S. Chekanov et al., "Measurement of the charm fragmentation function in D^* photoproduction at HERA", *JHEP* **04** (2009) 082.
191. ZEUS Collaboration, S. Chekanov et al., "Measurement of Beauty Photoproduction using Decays into Muons in Dijet Events at HERA", *JHEP* **04** (2009) 133.
192. Sidiq Mohamed Khidzir & Wan Ahmad Tajuddin Wan Abdullah, "Anomalous Diffusion in a Trading Model", presented at *International Meeting on Frontiers in Physics 2009 (IMFP 2009)*, Kuala Lumpur, Malaysia, 12-16 January 2009; in *FRONTIERS IN PHYSICS: 3rd International Meeting; AIP Conf. Proc.* **1150** (2009) 206-209.
193. Hedieh Monajemi, Sharifuddin M Zain & Wan Ahmad Tajuddin Wan Abdullah, "Some Comparisons of Quantum Chemistry ab-initio Methods in Studying Peptide Bond Energy Variation", presented at *International Meeting on Frontiers in Physics 2009 (IMFP 2009)*, Kuala Lumpur, Malaysia, 12-16 January 2009; in *FRONTIERS IN PHYSICS: 3rd International Meeting; AIP Conf. Proc.* **1150** (2009) 201-205.
194. Ahmad Neyamadpour, W. A. T. Wan Abdullah & Samsudin Taib, "Use of Artificial Neural Networks to Invert 3D Electrical Resistivity Imaging Data", presented at *International Meeting on Frontiers in Physics 2009 (IMFP 2009)*, Kuala Lumpur, Malaysia, 12-16 January 2009; in *FRONTIERS IN PHYSICS: 3rd International Meeting; AIP Conf. Proc.* **1150** (2009) 210-213.
195. P.F.Lee, Misni Misran & W.A.T.Wan Abdullah, "Electrophoretic mobility of different sizes synthesized titanium dioxide (TiO₂) based microemulsion", *Nano Science and Nano Technology* **3** (2009) 1-4.
196. ZEUS Collaboration, S. Chekanov et al., "Exclusive Photoproduction of Upsilon Mesons at HERA", *Phys. Lett. B* **680** (2009) 4-12.
197. ZEUS Collaboration, S. Chekanov et al., "Measurement of the Longitudinal Proton Structure Function at HERA", *Phys. Lett. B* **682** (2009) 8-22.
198. ZEUS Collaboration, S. Chekanov et al., "Measurement of charm and beauty production in deep inelastic ep scattering from decays into muons at HERA", *Eur. Phys. J. C* **65** (2010) 65-79.

199. Ahmad Neyamadpour, Samsudin Taib & W. A. T. Wan Abdullah, "Using artificial neural networks to invert 2D DC resistivity imaging data for high resistivity contrast regions: A Matlab application", *Computers & Geosciences* **35** (2009) 2268-2274.
200. Ahmad Neyamadpour, Samsudin Taib & W. A. T. Wan Abdullah, "An application of three-dimensional electrical resistivity imaging for the detection of an underground waste-water system", *Studia Geophysica et Geodaetica* **53** (2009) 389-402.
201. Ahmad Neyamadpour, W. A. T. Wan Abdullah & Samsudin Taib, "Use of four-electrode arrays in three-dimensional electrical resistivity imaging survey", *Studia Geophysica et Geodaetica* **54** (2010) 299-311
202. ZEUS Collaboration, S. Chekanov et al., "Scaled momentum distributions of charged particles in dijet photoproduction at HERA", *JHEP* **08** (2009) 077.
203. Wan Ahmad Tajuddin Wan Abdullah, "Nama, Subset, Logik, Kesegerakan dan Neurologi – Sains seperti yang Kita Difahami", presented at *Seminar Pemikiran Fizik Semasa ASASI, Bangi, 18 April 2009*.
204. Wan Ahmad Tajuddin Wan Abdullah, "kata, ungkapan, citraan, metafora dan penjiwaan fizik: suatu jalan rambang dalam alam puisi melayu", presented at *Seminar Antarabangsa Kesusasteraan Melayu X, Bangi, 18-19 November 2009*.
205. W. A. T. Wan Abdullah & S. M. Khidzir, "Anomalous Diffusion in Gibbsian-Breaking of Wealth Distribution", *Malaysian J. Sci.* **29** (2010) 167-173.
206. W. A. T. Wan Abdullah, "Some Minimalist Dynamics", presented at *International Conference on Computing in Science and Technology, Chiang Mai, Thailand, 4-6 August 2010*.
207. ZEUS Collaboration, S. Chekanov et al., "Multi-lepton production at high transverse momentum at HERA", *Phys. Lett. B* **680** (2009) 13-23.
208. ZEUS Collaboration, S. Chekanov et al., "Measurement of J/ψ helicity distributions in inelastic photoproduction at HERA", *JHEP* **12** (2009) 007.
209. H1 and ZEUS Collaborations; F.D. Aaron et al., "Multi-Leptons with High Transverse Momentum at HERA", *JHEP* **10** (2009) 013.
210. ZEUS Collaboration, S. Chekanov et al., "Measurement of J/ψ photoproduction at large momentum transfer at HERA", *JHEP* **5** (2010) 1-36.
211. ZEUS Collaboration, S. Chekanov et al., "Measurement of dijet photoproduction for events with a leading neutron at HERA", *Nucl. Phys. B* **827** (2010) 1-33.
212. H1 and ZEUS Collaborations; F.D. Aaron et al., "Events with an Isolated Lepton and Missing Transverse Momentum Measurement of W Production at HERA", *JHEP* **3** (2010) 1-19.
213. ZEUS Collaboration, S. Chekanov et al., "Measurement of isolated photon production in deep inelastic ep scattering", *Phys. Lett. B* **687** (2010) 16-25.
214. H1 and ZEUS Collaborations; F.D. Aaron et al., "Combined Measurement and QCD Analysis of the Inclusive e^+ - Scattering Cross Section at HERA", *JHEP* **01** (2010) 109.

215. ZEUS Collaboration, S. Chekanov et al., "A QCD Analysis of ZEUS Diffractive Data", *Nucl. Phys. B* **831** (2010) 1-25.
216. Faridah Mohamad Idris, Wan Ahmad Tajuddin Wan Abdullah, Zainol Abidin Ibrahim & Burhanuddin Kamaluddin, "Design and Simulation of FPGA-Based Readout Control of A High-Energy Electron-Proton Collision Calorimeter", in *NEUTRON AND X-RAY SCATTERING IN ADVANCING MATERIALS RESEARCH: Proceedings of the International Conference on Neutron and X-Ray Scattering – 2009; AIP Conf. Proc.* **1202** (2010) 131-134.
217. Saratha Sathasivam & Wan Ahmad Tajuddin Wan Abdullah, "The Satisfiability Aspect of Logic on Little Hopfield Network", *American J. Scientific Res.* **7** (2010) 90-105.
218. Ahmad Neyamadpour, W. A. T. Wan Abdullah & Samsudin Taib, "Inversion of quasi-3D DC resistivity imaging data using artificial neural networks", *J. Earth Syst Sci.* **119** (2010) 27-40.
219. Ahmad Neyamadpour, W. A. T. Wan Abdullah, Samsudin Taib & Behrang Neyamadpour, "Comparison of Wenner and dipole-dipole arrays in the study of an underground three-dimensional cavity", *J. Geophys. Eng.* **7**(2010) 30-40.
220. Ahmad Neyamadpour, W. A. T. Wan Abdullah, Samsudin Taib & Danesh Niamadpour, "3D inversion of DC data using artificial neural networks", *Studia Geophysica et Geodaetica* **54** (2010) 465-485.
221. ZEUS Collaboration; H. Abramowicz et al., "Scaled Momentum Spectra in deep inelastic Scattering at HERA", *JHEP* **6** (2010) 1-42..
222. ZEUS Collaboration; H. Abramowicz et al., "Inclusive-jet cross sections in NC DIS at HERA and a comparison of the k_T , anti- k_T and SIScone jet algorithms", *Phys. Lett. B* **691** (2010) 127-137.
223. ZEUS Collaboration; H. Abramowicz et al., "Measurement of beauty production in DIS and F_2^{bb} extraction at ZEUS", *Europ. Phys. J. C* **69** (2010) 347-360.
224. ZEUS Collaboration; H. Abramowicz et al., "Measurement of D^+ and Λ_c^+ production in deep inelastic scattering at HERA", *JHEP* **11** (2010) 1-27.
225. Wan Ahmad Tajuddin Wan Abdullah, "Looking for Plausibility", presented at Int Conf on Adv Comput Sci and Info Syst 2010 (ICACSIS2010), Bali, Indonesia, 20-22 November 2010.
226. Saratha Sathasivam & Wan Ahmad Tajuddin Wan Abdullah, "Logic Mining in Neural Network: Reverse Analysis Method", *Computing* **91** (2011) 119-133.
227. Anuar Alias, Ithnin Abdul Jalil & W. A. Tajuddin, "Schrodinger Equation in String Theory", *J. Nucl. Related Techn.* **7** (2010) 154-169.
228. Wan Ahmad Tajuddin Wan Abdullah, "Looking for Plausibility", presented at Int Conf Adv Comput Sci Info Syst 2010 (ICACSIS2010), Bali, Indonesia, 20-22 November 2010. [[arXiv:1012.5705](https://arxiv.org/abs/1012.5705)]
229. ZEUS Collaboration; H. Abramowicz et al., "Measurement of high- Q^2 charged current deep inelastic scattering cross sections with a longitudinally polarised positron beam at HERA", *Europ. Phys. J. C* **70** (2010) 945-963.

230. ZEUS Collaboration; H. Abramowicz et al., "Inclusive dijet Cross Sections in Neutral Current Deep Inelastic Scattering at HERA", *Europ. Phys. J. C* **70** (2010) 965-982.
231. ZEUS Collaboration; H. Abramowicz et al., "Measurement of the Energy Dependence of the Total Photon-Proton Cross Section at HERA", *Phys. Lett. B* **697** (2011) 184-193.
232. ZEUS Collaboration; H. Abramowicz et al., "Study of tau-pair production at HERA", *JHEP* **02** (2011) 117.
233. ZEUS Collaboration; H. Abramowicz et al., "Measurement of beauty production in deep inelastic scattering at HERA using decays into electrons", *Europ. Phys. J. C* **71** (2011) 1573-1587.
234. ZEUS Collaboration; H. Abramowicz et al., "Measurement of heavy-quark jet photoproduction at HERA", *Europ. Phys. J. C* **71** (2011) 1659-1674.
235. P. F. Lee, M. Misran & W. A. T. Wan Abdullah, " Effects of Joule Heating on Electrophoretic Mobility of Titanium Dioxide (TiO₂), Escherichia Coli and Staphylococcus Aureus (Live and Dead)", in N. A. Abu Osman et al. (eds), BIOMED 2011, IFMBE Proceedings 35, Springer, 2011, pp. 60-68.
236. Hadieh Monajemi, Sharifuddin Mohd Zain & Wan Ahmad Tajuddin Wan Abdullah, "Computational outlook on the ribosome as an entropy trap", *Computational and Theoretical Chemistry* **976** (2011) 148-152.
237. Hadieh Monajemi, Nasr Y. M. Omar, Mohamad Noh Daud, Sharifuddin Mohd. Zain & Wan Ahmad Tajuddin Wan Abdullah, "The Role of Initiator tRNA_i^{met} in Fidelity of Initiation of Protein Synthesis", *Nucleosomes, Nucleotides and Nucleic Acids* **30** (2011) 726-739.
238. Hadieh Monajemi, Sharifuddin Mohd Zain & Wan Ahmad Tajuddin Wan Abdullah, "Computational studies on the Cognate and Non-cognate Aminoacyl-tRNAs", *Malaysian J. Sci.* **30** (2011) 127-132.