

## Curriculum Vitae

QU Anjing, born in 1962, is a full professor in mathematics and history of science in Department of Mathematics at Northwest University (Xian) since 1997. He is the Dean of Department of Mathematics at NWU, and the director of Center for History of Mathematics and Sciences at NWU.

Since 2002, he has been a member of the *Executive Committee of International Commission on the History of Mathematics*. He served the *Chinese Society for the History of Mathematics* as a vice president during the period from 2002 to 2007. He has been a member of the editorial committee of several leading academic journals, such as *Studies in the History of Natural Sciences* (2007-), and *Chinese Journal for the History of Sciences and technology* □2005 -□. As the main sponsor, he organized several international conferences in Xian. Among them, he and Karine Chemla are organizing *The International Conference of the History of Modern Mathematics* which will be hold in August 2010, Xian.

Supported by the Li Foundation and Andrews W. Mellon Foundation, he visited the Needham Research Institute (Cambridge, UK) during the periods 1994.10 – 1995.11, and 2004.9 – 2005.2. He was a visiting scholar at Harvard University from 1999.2 to 2000.1. As a JSPS fellow, he visited Kyoto Sangyo University from 2001.1 to 2002.4.

He was an invited speaker of *International Congress of Mathematician-2002*. He has been the author of 90 academic papers and 4 books. Among them the *Chinese Mathematical Astronomy* just published by Science Press (Beijing, pp.698) in 2008.

Name: QU Anjing

Birthday: 25 June, 1962

Nationality: China

### Educations

- 1980 – 1984: Northwest University (Xian), pure mathematics, BA
- 1986 – 1989: Northwest University (Xian), history of science, MA
- 1991 – 1994: Northwest University (Xian), history of science, PhD

### Jobs

- Dean of the *Department of Mathematics* (NWU) □2009 - □
- Director of the *Center for History of Mathematics and Sciences* (NWU)
- The chief scientist of the *National Key (candidate) Program for History of Science at NWU*
- 1989 – present: Department of Mathematics, Northwest University (Xian)
  - Lecturer since 1990
  - Associate professor since 1994
  - Full professor since 1997

### Overseas Experiences

- 1994.10 – 1995.11: The Needham Research Institute, Cambridge, UK;  
Li Foundation (New Yoke), post-doctoral fellow
- 1999.2 – 2000.1: Department of History of Science, Harvard University, USA;  
visiting scholar
- 2001.1 – 2002.4: Faculty of Cultural Studies, Kyoto Sangyo University;  
JSPS fellow.
- 2004.9 – 2005.2: The Needham Research Institute, Cambridge, UK;  
Andrews W. Mellon Foundation, research fellow
- 2009.7 – 2009.8: Institute of Mathematical Sciences, Chinese University of  
Hong Kong, visiting professor

### Academic duties and honors

- Invited Speaker of *International Congress of Mathematician-2002*

- Sponsor of the *First National Conference on History and Pedagogy of Mathematics* (Xian, May, 2005)
- Sponsor of the *First International Conference on History of Exact Sciences along the Silk Road* (Xian, August, 2005)
- Sponsor of *The International Conference on the History of Mathematics* – a satellite conference of ICM-2002 (Xian, August, 2002)
- Co-sponsor of the Symposium-35 at XXIII International Congress of History of Science and Technology, Budapest, 2009: "History of Numerical Tables - the second meeting on history of exact sciences along the silk road"
- Co-sponsor of the Symposium-13 at XXII International Congress of History of Science and Technology, Beijing, 2005: "Along the silk road: mathematics and astronomical exchanges between East and West in ancient and medieval times"
- The Fifth China Association for Science and Technology (CAST) Award for the Especially Outstanding Academic Papers Published in the Periodicals of CAST (2007)
- The First Li Ching Prize Essays for Junior Scholars in the History of Chinese Science (Taiwan, 1998) and a few other academic awards.
- Member of editorial committee of *Studies in the History of Natural Sciences* (2007- )
- Member of editorial committee of *The Chinese Journal for the History of Science and Technology* (2005- )
- Member of the *Executive Committee of International Commission on the History of Mathematics* (2002 – )
- Vice President of *Chinese Society for the History of Mathematics* (2002 – 2007)

#### Scientific Funding

- Traditional Numerical Methods and Their Applications into Modern Science, **National Natural Science Foundation of China**, 10771169, 2008.01~2010.12, 250,000RMB
- Numerical Method in Traditional Chinese Sciences and Their Values in the Sense of Modern Science, **National Natural Science Foundation of China**, 10471111, 2005.01~2006.12, 100,000RMB

#### Academic publications

- Editor in Chief. Series for History of Mathematics and Sciences. Beijing: Science Press (2005 - )
- The Author who published the most in the leading Chinese journal *Study in the History of Natural Sciences* in last 20 years
- 4 books in Chinese and more than 90 academic articles in Chinese, English or Japanese have been published

#### Contact me

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- Tel: 0086-29-88497126

## A List of Publications of Qu Anjing

2010.03.01

**Books (in Chinese)**

1. *Chinese Mathematical Astronomy*. [Zhongguo shuli tianwenxue]. Beijing: Science Press, 2008, 690 pp.
2. *Chinese Calendar and Mathematics*. [Zhongguo lifa yu shuxue] Beijing: Science Press, 2005, 410 pp.
3. *A New Study on the Zhoubi Suanjing*. [Zhoubi suanjing xinyi] Xian: Shaanxi People's Press, 2002, 177 pp.
4. *Explorations on Mathematical Astronomy in Ancient China* (Qu, Ji & Wang). [Zhongguo gudai shuli tianwenxue tanxi]. Xian: Northwest University Press, 1994, 322 pp.
5. *Science and Technology Awards in Modern China* (Editor in Chief). [Zhongguo jin xian dai ke xue ji shu shi yan jiu cong shu] . Jinan: Shandong Education Press, 2005, 325 pp.
6. *A Concise History of Chinese Mathematics* (Editor in Chief). [Zhongguo gudai kexue jishu shigang – shuxue juan]. Shenyang: Liaoning Education Press, 2000, 488 pp.

#### Articles in English & Italian

1. Why Mathematics in Ancient China. *Proceedings of Research Institute of Mathematical Sciences (1392)*. Kyoto: RIMS Kyoto University, 2004□15~26
2. The Third Approach to the History of Mathematics in China, *Proceedings of the International Congress of Mathematicians 2002*, vol. III, Beijing: Higher Education Press, 2002, 947-958
3. Revisiting An Eighth Century Chinese Table of Tangents, *History of Oriental Astronomy*, Dordrecht: Kluwer Academic Publishers, 2002, 215-225
4. Why Interpolation? *Historical Perspectives on East Asian Science, Technology and Medicine*, Singapore: Singapore University Press & World Scientific Publishing, 2002, 336-344
5. Responses to Prof. Yabuuti's Work: Studies on Mathematical Astronomy in Ancient China, *East Asian Science, Technology and Medicine*, 2001, 18 : 20-23
6. On Complementary Consecutive Labelings of Octahedron. *Ars Combinatoria* (Canada) , 1999, 51(1): 287-294
7. Interpolations in Medieval Chinese Mathematical Astronomy. In Y. K. Kim and F. Bray ed. *Current Perspectives in the History of Science in East Asia* (Korea), Seoul: Seoul National University Press, 1999, 264-277
8. Proof of the Pythagorean Theorem in *Zhou Bi Suan Jing*. *Proceeding of the 7<sup>th</sup> International Conference on the History of Science in China*. Zhengzhou: Daxiang Press, 1999, 179-192
9. Numerical Methods in Medieval Chinese Mathematical Astronomy. *Journal of Northwest University* (Natural Sciences Edition), 1998, 28(2): 99-104
10. On Hypotenuse Diagrams in Ancient China. *Centaurus* (Denmark) ,1997, 39(3):193-210
11. Bian Gang: A Mathematician of the 9th Century. *Historia Scientiarum* (Japan) ,1996, 6(1): 17-30
12. Perche la matematica nella Cina antica? in Michele Emmer ed.: *Matematica e Cultura 2003*, Milan: Springer-Verlag, 2003, 205-217
13. Mathematical Methods in Calendar Making. *Storia della Scienza, vol.II, Science in China* (Italy), Rome: Enciclopedia Italiana, 2001□153~155

#### Articles in Japanese

14. The Third Approach to the History of Mathematics in China. *Japanese Journal for the History of Mathematics*, 2003□179□24~49; *Proceedings of Research Institute of Mathematical Sciences (1317)*. Kyoto: RIMS Kyoto University, 2003□91~107
15. A Comparison Study on the Models of Eclipse among Chinese, Indian and Islamic Astronomy.

*Japanese Journal for the History of Mathematics*, 2000□164: 1-25

16. The Reconstruction of Yixing's Tangents Table. *Japanese Journal for the History of Mathematics*, 1997□ 153: 18□29
17. Inverse Function in the *Jiyuan Calendar-making System*. *Japanese Journal for the History of Mathematics*, 1996□150: 13□21
18. How did Chinese Study the History of Mathematics in Last Century. *Proceedings of Research Institute of Mathematical Sciences (1317)*. Kyoto: RIMS Kyoto University, 2003□91~107
19. How did Zu Chongzhi Find His Value of  $\pi=355/113$ . *Proceedings of Research Institute of Mathematical Sciences (1257)*. Kyoto: RIMS Kyoto University, 2002□163~172

#### Articles in Chinese

20. The *Shicha* Algorithm of Lunar Eclipse in Ancient China (with Tang). *Studies in the History of Natural Sciences*□2008, 27□3□□301-308
21. Research on the Parallax Theory in Ancient Greece, India, Arabia and China (with Tang). *Studies in the History of Natural Sciences*□2008, 27□2□□131-150
22. Exploring the Astronomical Meaning of Algorithm by Ancient Chinese Mathematical Astronomers (with Yuan & Tang). *Studies in the History of Natural Sciences*□2007, 26□1□□1-11
23. A Study on Parallax Theory in Ancient China with *Shicha* Algorithm as an Example (with Tang) . *Studies in the History of Natural Sciences*□2007, 26□2□□125-154
24. Planetary Theory in Ancient China. *Studies in the History of Natural Sciences*□2006, 25□1□□1~17
25. A Study on Pierre Simon de Laplace's *Théorie Analytique des Probabilités* (with Xu) . *Studies in the History of Natural Sciences*□2006□25□3□□227~238
26. Parallax Theory in the *Surya Siddhanta* (with Tang). *Studies in the History of Natural Sciences*□2005, 24□3□□197~213
27. An Intercalary Method in Chinese Mathematical Astronomy. *Studies in the History of Natural Sciences*□2005, 24□2□□190~195
28. Lunar Motion Theory in the *Shoushi li*. *Studies in the History of Natural Sciences*, 2003□, 22□4□: 336-350
29. Revisit the Solar Eclipse Theory in Ancient China. *Studies in the History of Natural Sciences*, 2002, 21□2□:97-114
30. A Core Algorithm of methods for Calculating Solar Shadow and Water Clock in Ancient China's Calendar-making System (with Yuan & Wang□. *Studies in the History of Natural Sciences*, 2001, 20(4): 302-311
31. Algorithm for Calculating Solar Shadows in Ancient Chinese Calendar-making Systems (Qu, Yuan & Wang). *Studies in the History of Natural Sciences*, 2001□20(1): 13-21
32. Progress of Studies on the History of Chinese Calendar-making Systems: A Review of *Gu Li Xin Tan*. *Studies in the History of Natural Sciences*, 1999□18(3): 277-281
33. A Reconstructed Calendar-making System of the *Taiyi* Method in the Song Dynasty. *Studies in the History of Natural Sciences*□1999□18(1): 69-77
34. Reconstruction of A Difference Table of the Solar Shadow in the *Dayan Calendar-making System*. *Studies in the History of Natural Sciences*, 1997□16(3): 233-244
35. Cubic Interpolation in Ancient Chinese Calendar-making Systems. *Studies in the History of Natural Sciences*, 1996□15(2): 131-143
36. Textual Study on Superior Epoch of Four Calendar-making Systems of the *Wangrui*, *Zhidao*, *Qianxing* and *Yiwei*. *Studies in the History of Natural Sciences*, 1994, 13(3): 222-235

37. Commentary on the Revision Made by Li Chunfeng and his Colleagues about the Formula of Solar Altitude in the *Gaitian Theory* of Hemispherical Dome. *Studies in the History of Natural Sciences*, 1993□12(1): 42-51
38. Analysis of Examples of *Yanji Shangyuan* and their Algorithm in Calendar-making Systems of the Tang and Song Dynasties. *Studies in the History of Natural Sciences*, 1991, 10(4): 315-326
39. The Source of the Synodic Period of Five Planets in Chinese Calendar-making Systems from the East Han to the Liu Song Dynasty. *Acta Astronomica Sinica*, 1992, 33(1): 109-112
40. The Selection of Superior Epoch in Chinese Calendar-making Systems during the Period from the East Han to the Liu Song Dynasty. *Acta Astronomica Sinica*, 1991, 32(4):436-439
41. Two Approaches to Study the History of Chinese Mathematics. *Science*□2004□56□2□□27-30
42. On the Precision of Planetary Computations in the Northern Song Dynasty (with Tang). *The Chinese Journal for the History of Science and Technology*□2009, 30(1)□46~54
43. The Completion of Yabuuti-Nakayama's *Shoushi Li* Project. *The Chinese Journal for the History of Science and Technology*□2006□27(3)□264~270
44. Pao-Lu Hsu:A Pioneer of Chinese Probability Theory and Mathematical Statistics (with Xu). *Chinese Journal for the History of Science and Technology*□2006□27(4)□340~347
45. Changing the Paradigm: Research on History of Mathematics in China. *The Chinese Journal for the History of Science and Technology*□2005□26□1□□50~58
46. The Life and Contributions of Historian of Chinese Mathematics Li Jimin. *China Historical Materials of Science and Technology*, 1997□18(1): 71□79
47. Some Historical Materials about Ancient Chinese Calendar-making Systems in *Tianwen Dacheng Guankui Jiyao*. *China Historical Materials of Science and Technology*, 1995, 16(3): 84□91
48. Suppose that Kepler was a Chinese (with Yuan). *Journal of Dialectics of Nature*□2008□30□1□□69-74
49. Revisiting the Two Movements of Research on China Mathematics History. *Journal of Dialectics of Nature*□2006□28□5□□100~104
50. The Pioneer of Probability Theory——Christian Huygens (with Xu). *Journal of Dialectics of Nature*, 2006, 28□6□□76-80.
51. How did Zu Chongzhi find his value of  $\pi=355/113$ . *Journal of Dialectics of Nature*, 2002, 24□3□□72-77
52. A Comparison Study on the Models of Eclipse among Chinese, Indian and Islamic Astronomy. *Journal of Dialectics of Nature*, 2000□22(3): 58-68
53. Ecliptic and the *Qi Heng Tu* (A Balanced Figure of Seven) in the *Gaitian Theory*. *Journal of Dialectics of Nature*, 1994, 16(6): 55-60
54. A Cosmic Model in the *Zhoubi Suanjing*: No Choice. *Studies in Dialectics of Nature*, 1997□13(8): 37□40
55. The Cosmic Model of Liangwu Emperor. *Science Technology and Dialectics*, 2008, 25(2): 85-89
56. The Solar Motion Theory around the Sui Dynasty. *Exploration of Nature*, 1994, 13(3): 104-111
57. Huygens' Five Problems on Probability (with Xu). *Journal of Mathematical Research and Exposition*, 2007□27□4□□987-992
58. The Content of the New Mathematics Curriculum in the View of HPM (with Feng). *Curriculum, Teaching Material and Method*, 2007, 9:38~42
59. Applications of the Tangents Table in Yixing's Meridian Survey of the 8th Century. *Chinese Studies*

- (Taiwan)□1998,16(1): 91-109
60. The Time System in Ancient Chinese Calendrics. *Chinese Studies (Taiwan)*□1994□12(2): 157-172
  61. A Study on the Theory of Solar Eclipse in the *Dayan li* (with Yuan). *Tsing Hua Journal of Chinese Studies*□2007□37□1□159~173
  62. The First Calendar-making System of the *Taiyi* Method. *Tsing Hua Journal of Chinese Studies (Taiwan)*□1998, 28(2):203-220
  63. On Ancient Chinese Derivation of the Volumes of A Pyramid and Cuneate Solids. *Tsing Hua Journal of Chinese Studies (Taiwan)*□1997, 27(2): 201-215,
  64. Proofs of Pythagorean Theorem of Shang Gao, Zhao Shuang and Liu Hui. *Mathmedia (Taiwan)*□1996, 20(3): 20□27,
  65. Eclipse Cycles and Continued Fraction in Calendar-making Systems of the Tang and Song Dynasties. *Mathmedia (Taiwan)*□1995, 19(4): 73□79,
  66. Shicha Algorithm in the *Suyra Siddhanta* (with Tang). *Journal of Northwest University* (Natural Science Edition), 2005, 35(1): 117~121
  67. Algorithms for the Leap Month in Ancient China: A Probability Problem. *Journal of Northwest University* (Natural Science Edition), 2000, 30(6): 193-195
  68. On Dingshuo Algorithm of *Dayan li* and Explanation of Program (with Shang). *Journal of Northwest University* (Natural Science Edition), 1999, 29(3): 193-195
  69. On Algorithms of the Mo and Mie in Calendrics of Ancient China (with Li & Han□. *Journal of Northwest University* (Natural Science Edition), 1998, 28(5): 369-373
  70. Formula of Root and Inverse Functions in Ancient China. *Journal of Northwest University* (Natural Science Edition), 1997, 27(1): 1-5
  71. B.G. Successive Piecewise Parabolic Interpolation. *Journal of Northwest University* (Natural Science Edition)□1996, 26(1): 1-6
  72. Selection of the Constant of Synodic Month in Ancient Chinese Calendar-making Systems. *Journal of Northwest University* (Natural Science Edition), 1994, 24(4):323-329
  73. Shicha Algorithm in Ancient China (with Tang). *Journal of Shihezi University* (Natural Science Edition), 2005, 23(4): 416~421
  74. Algorithm of Parallax in Ancient China (with Tang). *Journal of Guangxi University for Nationalities* (Natural Science Edition), 2005□11(1): 56~62
  75. The Procedure of Evolution Method in the *Nine Chapters on Mathematical Arts*: Geometric or Algebraic. *Journal of Shangluo Teachers College*, 1998, 9(4) : 5-13
  76. On A Method of Rational Approximation in Ancient China. *Pure and Applied Mathematics*,1997, 13(special issue):29□34
  77. Was there an algorithm of Continued Fraction in Calendar-making Systems of the Han Dynasty. *Collected Papers on Studies of History of Mathematics*. Hohhot: Inner Mongolia University Press, 1998, 6: 13-21
  78. On Mathematical Properties of Intercalary Cycles in Ancient Chinese Calendrics. *Collected Papers on Studies of History of Mathematics*. Hohhot: Inner Mongolia University Press, 1993, 5: 14-25
  79. A Study on the Diagram of the Solar Altitude. *Collected Papers on Studies of History of Mathematics*. Hohhot: Inner Mongolia University Press, 1992, 3: 45-48
  80. A Study on a Problem in *Mathematical Treatise in Nine Chapters*. *Collected Papers on Studies of History of Mathematics*. Hohhot: Inner Mongolia University Press, 1991, 2: 71-73

81. Selection of the Superior Epoch in the *Daming Calendar-making System*. *Collected Papers on Studies of History of Mathematics*. Hohhot: Inner Mongolia University Press, 1991□2: 51-57
82. The algorithm for Choosing A Superior Epoch in Ancient Chinese Calendar-making System. *Collected Papers on Studies of History of Mathematics*. Hohhot: Inner Mongolia University Press, 1990, 1: 24-36
83. On Mathematical Properties of Liu Hui's Algorithm of  $\pi$ . *Studies on Liu Hui*. Xian: Shaanxi Education Press, 1993□170-192
84. On Superior Epoch and Five Planetary Constants in Calendar-making Systems of the *Sifeng*, *Qianxiang* and *Jingchu*. *Collected Papers of Astronomical History*. Beijing: Science Press, 1994, 6: 59-80
85. Chronology and Related Problems. *Studies on the Culture in Zhou, Qin, Han and Tang Dynasties*. Xian: Sanqin Press, 2007□5□3-23
86. Geometric Models of the Nine Passes of the Moon. *Studies on the Culture in Zhou, Qin, Han and Tang Dynasties*. Xian: Sanqin Press,□2006□4: 45~54
87. How did the Ancient Chinese Scholars Deduce the Size of their Universe. *Studies on the Culture in Zhou, Qin, Han and Tang Dynasties*. Xian: Sanqin Press, 2002□3: 19~26
88. Ancient China's Knowledge of Precession Phenomenon. *Studies on the Culture in Zhou, Qin, Han and Tang Dynasties*. Xian: Sanqin Press, 2003□2: 122~141
89. The Non-Decimal System and a Pascal's Triangle in *Yijing* in the Song Dynasty. *Studies on the Culture in Zhou, Qin, Han and Tang Dynasties*. Xian: Sanqin Press, 2002□1: 102-113
90. A Textual Study of Calendar-making System of the *Taiyi* Method in the Tang Dynasty. *Studies on Zhou, Qin, Han and Tang Dynasties*. Xian: Northwest University Press, 1997, 1: 381-400,.