

**Name: Hao SHAN**



**Professional:**

Master Supervisor

Director of Xinjiang Astronomical Observatory, CAS

**Education:**

2006-2010	Tsinghua University	Ph.D.
2002-2005	Beijing Institute of Technology	M.S.
1997-2001	Ocean University of China	B.S.

**Contact:**

E-mail: shanhao@xao.ac.cn

Postal Address: 150 Science 1-Street, Urumqi, Xinjiang 830011, China

**Research Interests:**

His research interests include radio astronomical signal processing, object detection based on pattern recognition, sparse representation and mathematical optimization theory, wavelets, compressed sensing, image denoising, and dictionary learning.

**Selected Publications:**

1. CS-GAC: Compressively Sensed Geodesic Active Contours. Hao Shan. Pattern Recognition, 2023.
2. Robust RFI Excision for Pulsar Signals by a Novel Nonlinear M-type Estimator with an Application to Pulsar Timing. Hao Shan. APJ. 2023.
3. Sparsity and M-Estimators in RFI Mitigation for Typical Radio Astrophysical Signals. Hao Shan, Ming Jiang, Jianping Yuan, Xiaofeng Yang, Wenming Yan, Zhen Wang, Na Wang. Universe. 2023.
4. Wavelet based tone mapping (TM) enhancement to a detection system for faint and compact sources in HDR and large FOV radio scenes. Hao Shan, Lang Cui, Xiaoyu Hong, Xiang Liu, Ning Chang. Astronomy and Computing. 2023.
5. Compressed Sensing Based RFI Mitigation and Restoration for Pulsar Signals. Hao Shan, Jianping, Yuan, Na Wang, Zhen Wang. APJ. 2022.
6. Wavelet based recognition for pulsar signals. Hao Shan, Xin Wang, Jianping

Yuan, Jun Nie, Ningning Liu, Na Wang. *Astronomy and Computing*, 11(6), 55–63, 2015.

7. MCA aided geodesic active contours for image segmentation with textures. Hao Shan, Changtao He, Na Wang. *Pattern Recognit. Lett.* 2014.
8. Curvelet-based geodesic snake for image segmentation with multiple objects. Hao Shan, Jianwei Ma. *Pattern Recognit. Lett.* 2010.
9. Comparisons of wavelets, contourlets and curvelets in seismic denoising. Hao Shan, Jianwei Ma, Huizhu Yang.