

## Publications

1. **H. J. Kuan**, J. Singh, D. D. Doneva, S. S. Yazadjiev, and K. D. Kokkotas. Nonlinear evolution and non-uniqueness of scalarized neutron stars. [arXiv:2105.08543 \[gr-qc\]](#), accepted manuscript in Phys. Rev. D.
2. D. Huang, C. Q. Geng, and **H. J. Kuan**. Scalar gravitational wave signals from core collapse in massive scalar-tensor gravity with triple-scalar interactions. *Class. Quant. Grav.*, 38:245006, November 2021. doi:[10.1088/1361-6382/ac35ab](#).
3. **H. J. Kuan**, D. D. Doneva, and S. S. Yazadjiev. Dynamical Formation of Scalarized Black Holes and Neutron Stars through Stellar Core Collapse. *Phys. Rev. Lett.*, 127:161103, October 2021. doi:[10.1103/PhysRevLett.127.161103](#).
4. **H. J. Kuan**, A. G. Suvorov and K. D. Kokkotas, General-relativistic treatment of tidal g-mode resonances in coalescing binaries of neutron stars. II. As triggers for precursor flares of short gamma-ray bursts. *MNRAS*, 508(2):1732-1744, December 2021. doi:[10.1093/mnras/stab2658](#).
5. **H. J. Kuan**, A. G. Suvorov, and K. D. Kokkotas. General-relativistic treatment of tidal g-mode resonances in coalescing binaries of neutron stars - I. Theoretical framework and crust breaking. *MNRAS*, 506(2):2985-2998, September 2021. doi:[10.1093/mnras/stab1898](#).
6. C. Q. Geng, **H. J. Kuan**, and L. W. Luo. Inverse-chirp imprint of gravitational wave signals in scalar tensor theory. *Eur. Phys. J. C*, 80:780, August 2020. doi:[10.1140/epjc/s10052-020-8359-y](#).
7. C. Q. Geng, **H. J. Kuan**, and L. W. Luo. Viable Constraint on Scalar Field in Scalar-Tensor Theory. *Class. Quant. Grav.*, 37:115001, May 2020. doi:[10.1088/1361-6382/ab86fb](#).