Research Result Report ICRR Inter-University Research Program 2023

Research Subject: Self interacting dark matter and gravitational waves	
Principal Investigator:	Quynh Lan Nguyen
	Tagoshi Hideyuki (host faculty)
Participating Researchers:	
Summary of Research Result:	
In this research we study the dark matter in the beyond standard models specific self-interacting	
dark matter and its impact on the gravitational waves signal. We also study the magnetic field in	
the merging galaxy to under	estand the dynamics of the jet and its impact on the merging process of
the supermassive black hole.	
Publications:	
One public	cation on proceedings of the European Physical Society Conference on
High Energ	gy Physics.
One paper	submitted to the Astrophysical Journal.
Presentations: we have given 4 presentations at the conferences	
Training: 4 undergraduate students.	
No.	