

Script for Science Outreach Video

Author: Amlan Nanda (University of Tokyo), remote participation, file sent by email 30/03/2023.

Theme for the video: Compact Binary Merger

Target audience: Anyone who watches YouTube

Duration of the video: 5 minutes

Format: Animation

Title of the video: Clash of the warriors

Ominous music plays. Black Screen.

“Warring states period of Japan” (no voiceover, only stylized text)

“On a lone field marred by war”

“Two warriors collide”

Animation starts. Full moon night. Clear sky. The wind rustles the grass. A burning castle in the distance. Silence of the night. Owl hoots. A lone samurai, wearing a partially destroyed red armor, moves around silently. He senses a presence. Few feet away, yet another samurai. He is much larger and wears blue armor. An enemy. They have both seen each other. Swords have been drawn. They circle each other slowly, both afraid to make the first move. They read each other carefully and come closer, still circling each other. As they reach nearer, they start running slowly, still in circles. They move faster and faster. They dash, still in circular motion, and then their swords collide. The collision causes steel to vibrate and emit a sharp sound.

Cut

“In a neighboring galaxy”

“In an empty vacuum between star clusters”

“Two compact objects collide”

Second part of animation starts. Dead of Space. No wind. No fire. No life. A neutron star in isolation. It is gravitationally attracted by a heavier black hole. They start inspiralling. Before merger, the neutron star is tidally disrupted, and it starts getting swallowed by the black hole. The black hole and the neutron star collide. An accretion disk is formed. The black hole rings down and stabilizes. End of animation.