Astrophysical Black Holes: A Review By: Cosimo Bambi

Link to Online-Paper

1. The 6 Moves represented in the paper, as well as its location & explanation:

Move 1: "Writers respond to what others have said about their topic"

- Location: Page 1, Introduction.
- Example: "The existence of black holes was postulated in 1783 by John Michell and in 1796 by Pierre-Simon Laplace."
- **Explanation:** The author references historical stances by Michell and Laplace, acknowledging prior discussions on the concept of black holes.

Move 2: "Writers state the value of their work and announce the plan for their papers."

- Location: Page 1, Introduction.
- **Example:** "In this review, I have tried to focus on the development of the field, from the first speculations to the current lines of research."
- **Explanation:** The author showcases the importance of the review, elaborating its value in tracing the evolution of black hole research.

Move 3: "Writers acknowledge that others might disagree with the position that they have taken"

- Location: Page 3, Section 2.
- Example: "While the existence of stellar-mass black holes is widely accepted, the actual proof of their existence is still a matter of debate."
- **Explanation:** The author recognizes ongoing debates in reference to the proof of black holes, demonstrating awareness of differing viewpoints.

Move 4: "Writers adopt a voice of authority."

- Location: Page 5, Section 3.
- Example: "The detection of gravitational waves from binary black hole mergers has opened a new window in astronomy."
- **Explanation:** The author implies the significance of gravitational wave detections, demonstrating expertise in the subject.

Move 5: "Writers use academic and discipline-specific vocabulary."

- Location: Throughout the paper.
- **Example:** Terms like "event horizon," "singularity," and "accretion disk" are used extensively.
- **Explanation:** The use of specific terminology reflects the academic nature of the paper and to readers who might be familiar with astrophysics.

Move 6: "Writers emphasize evidence, often in tables, graphs, and images."

- **Location:** Page 7, Figure 1.
- Example: Figure 1 illustrates the "Mass spectrum of black hole candidates."
- **Explanation:** Having this figure provides visual evidence supporting discussions on black hole mass distribution.

2. Explanation for choosing this paper:

I chose the paper "Astrophysical Black Holes: A Review" by Cosimo Bambi because I am deeply fascinated by black holes and mysteries it has in astrophysics. This review was very interesting to me with its exploration of black hole research, but even more specifically how COsimo Bambi bridged speculations within astrophysics and modern technological advancements. The paper's use of the six-moves, provides a great framework for understanding and analyzing the reputable paper for a student like me. Its deep coverage of gravitational waves, event horizons, and singularities, along with the evidence and discussions provided, made me more knowledgeable of black holes but also made me more enthusiastic in astrophysical research. Due to this knowledge and excitement, I decided to choose this paper, *Astrophysical Black Holes: A Review*, by Cosimo Bambi.