Primordial Black Hole Paper Comments/Suggestions

• Pg. 2, Line 12: “By evolving an ingoing solution past a gravitationally collapsing objects, Hawking showed that a black hole will thermally emit[comma] with a temperature inversely proportional to the black hole mass[comma] all available species of fundamental particles.”
  ○ Adding the commas clarifies the meaning of the sentence, or instead switching the two underlined clauses would clarify this sentence as well

• Pg. 5, Lines 130-132: “As the evaporation proceeds to higher temperatures, the greater the number of degrees of freedom of emitted fundamental particles will be and the faster and more powerful the final burst will be, with...”
  ***OR***
  “As the evaporation proceeds to higher temperatures, the greater will the number of degrees of freedom of emitted fundamental particles be and the faster and more powerful will the final burst be, with...”
  ○ The words “will be” do not sound correct in their current location (in my opinion), but I would not say it is currently necessarily incorrect
  ○ “degrees of freedom” should be before “emitted fundamental particles” because it is the number of degrees of freedom and not emitted particles that will be greater as evaporation proceeds to higher temperatures (at least that's how I understood it based on this sentence, but if that is incorrect then perhaps this sentence conveys the wrong message?)

• Page 7, Lines 165-166: “To search for the emission from a PBH burst[comma] one needs to for an excess [of...?] that can...”
  ○ It is unclear to me what the excess must be an excess of? An excess of cosmic-ray flux, of gamma-ray flux, or something else?

• Page 7, Line 182: “Here[comma] p_0 ...”

• Page 9, Line 228: “First[comma] we created skymaps...”
• Page 9, Table 2: “Milagro effective area parametrization parameters for various...”
  ○ Is it supposed to say “parametrization parameters” or just either “parametrization” or “parameters”?

• Page 14, Lines 346-347: “The final upper limits on the PBH burst rate density if[comma] at the 99% confidence level[comma] zero PBH bursts are observed...”
  ○ Adding these commas will make this sentence more clear and more grammatically correct.

• Page 17, Line 388: “However[comma] the anti-proton derived limit depends...”