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Determining the Cause of Mass Segregation in h Persei ZAC LONG, ANN BRAGG, Marietta College — The double cluster h and chi Persei is unusual in that it is a pair of open clusters which are close to the same age and close in proximity to each other. Despite these similarities, however, we see a large difference in the distribution of masses in these clusters. In h Persei we observe that the more massive stars are closer to the core than the less massive stars, while in chi Persei we see a much more uniform distribution of masses. This difference in mass distribution is a puzzle which cannot be solved using information that is currently available. This poster will show the need for more velocity measurements of the stars in these clusters in order to determine cause of the observed difference. The necessary observations will be characterized and their feasibility will be assessed.

Ann Bragg Marietta College

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