I chose to explore a NASA article, “Hubble Makes Surprising Find in Early Universe”, which pairs the advances in space research with the formation of the universe. This news article relates to the topics of the formation of the universe as well as our solar system. Some of what we have studied on the formation of the universe and how to characterize space objects is found in this article.

European researches have made a shocking discovery using the Hubble Space Telescope, this discovery suggests that “the formation of the first stars and galaxies in the early universe took place sooner than previously thought.” (Garner, 2020). In observing galaxy clusters of stars with the Hubble Telescope and probing in cosmic time to understand the state of these clusters, researcher Rachana Bhatawdekar and her team “found no evidence of these first-generation Population III stars in this cosmic time interval” (Garner, 2020). Population lll stars are “stars [that have not been] formed [by] ‘recycled’ previous generations of stars, but was pristine material left over from the Big Bang” (Swinburne University). In layman’s terms, the lack of these stars in early cosmic time suggests that “galaxies must have formed much earlier than we thought” (Garner, 2020).

Historically, space research has helped humans learn more about the Earth. This topic has the ability to impact what we know about our Earth and its formation.

As the NASA article eloquently states, “This [topic] leaves an exciting area of further research for the upcoming NASA/ESA/CSA James Webb Space Telescope — to study the universe's earliest galaxies.” With a new era of space exploration occurring as we speak, the information we gather on our galaxy and those that Hubble Space Telescope can offer a look on can change the way we innovate. This discovery will impact the direction of galaxy formation research and will impact what others focus their research on in the future.

I believe this topic to be so newsworthy because it is such a phenomenal example of humans using technology to learn more about space. It is so intriguing how researchers are manipulating years old satellites sent into space to conduct new research.

Sources:

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Swinburne University (Ed.). (n.d.). Population III: COSMOS. Retrieved June 8, 2020, from https://astronomy.swin.edu.au/cosmos/P/Population III