# Article information:

A high-mass X-ray binary descended from an ultra-stripped supernova | Nature  
<https://www.nature.com/articles/s41586-022-05618-9>

# Article summary:

1. Ultra-stripped supernovae are different from other terminal explosions of massive stars, as they show little or no ejecta from the actual supernova event.

2. A recently discovered high-mass X-ray binary, CPD −29 2176 (CD −29 5159; SGR 0755-2933), has an evolutionary history that shows the neutron star component formed during an ultra-stripped supernova.

3. Binary neutron stars, such as the system that produced the kilonova GW170817, are known to produce a large quantity of heavy elements.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is generally reliable and trustworthy in its reporting of scientific facts and evidence. The authors provide a detailed description of their research findings and cite relevant sources to support their claims. They also discuss potential biases and risks associated with their research, such as the possibility of incomplete data or inaccurate assumptions about the system's orbital elements. Additionally, they present both sides of the argument equally by discussing both the advantages and disadvantages of ultra-stripped supernovae in forming binary neutron stars.

However, there are some areas where the article could be improved upon. For example, it does not explore counterarguments to its claims or provide any evidence for its assertions about binary neutron stars producing a large quantity of heavy elements. Additionally, it does not discuss any potential implications or applications of its findings beyond simply noting that binary neutron stars can produce heavy elements. Finally, while it does mention potential biases and risks associated with its research, it does not provide any specific examples or details on how these might affect its conclusions.

# Topics for further research:

* Counterarguments to ultra-stripped supernovae
* Implications of binary neutron stars
* Applications of binary neutron stars
* Evidence for binary neutron stars producing heavy elements
* Biases and risks associated with ultra-stripped supernovae research
* Impact of biases and risks on ultra-stripped supernovae research conclusions

# Report location:

<https://www.fullpicture.app/item/2dfa556e4686f65bd6495a0ca5139399>