# Article information:

Phys. Rev. Applied 18, 044050 (2022) - Experimental Observation of the Multiple Higher-Order Extensible Topological States in Acoustic Systems  
<https://journals.aps.org/prapplied/abstract/10.1103/PhysRevApplied.18.044050>

# Article summary:

1. This article presents the experimental observation of multiple higher-order extensible topological states in acoustic systems.

2. The higher-order extensible topological states are induced by the Jackiw-Rebbi mechanism and are protected by band topology.

3. The pressure fields of the higher-order extensible topological states are localized within a certain range of the vertical direction, rather than at a corner, and decay exponentially in the horizontal direction.

# 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, as it provides evidence for its claims through theoretical simulations and experiments. The authors have also provided detailed descriptions of their methods and results, which makes it easier to evaluate their findings. Furthermore, they have discussed potential risks associated with their research, such as limited sample size due to fabrication constraints.

However, there are some points that could be improved upon in terms of trustworthiness and reliability. For example, the authors do not provide any counterarguments or explore alternative explanations for their findings. Additionally, they do not discuss any potential biases or sources of error that may have affected their results. Finally, while they provide evidence for their claims, they do not present both sides equally or explore all possible implications of their research.

# Topics for further research:

* Counterarguments to research findings
* Alternative explanations for research results
* Biases in research studies
* Sources of error in experiments
* Exploring implications of research
* Presenting both sides of an argument

# Report location:

<https://www.fullpicture.app/item/3ebc4bfbdd3f5fbd8816a572ec58089a>