

AIAA Fluid Dynamics Technical Committee (FDTC)

Abstract Guidelines

AIAA Aviation Forum 2027

Note: Authors submitting abstracts are strongly encouraged to review the extended abstract guidelines below. Non-conforming abstracts will be rejected during the review process.

Guidelines for Submitting Extended Abstracts:

To ensure high-quality technical papers, extended abstracts must conform to the guidelines stated below. Submissions that do not comply with these requirements will be rejected during abstract review.

- Submitted extended abstracts must conform to the AIAA template for conference papers: <https://www.aiaa.org/events-learning/events/Technical-Presenter-Resources>
- Extended abstracts must have a minimum of 1,000 words but must not exceed 25 pages in length.
- Additionally, the extended abstract should be considered a preliminary draft of the conference paper and *should contain sufficient results such that it can be presented with little to no additional content*.
- Authors should follow the below guidelines regarding the contents of the extended abstract.
 - **Abstract:** The extended abstract must begin with a 100-200 word abstract.
 - **Introduction:** This must be followed by an introduction section that provides the background/context for the paper, a brief assessment of prior work by others, and an explanation of the paper's main contributions.
 - **Technical sections:** Appropriately titled technical sections should be included that provide sufficient details on the methodology or technical approach.
 - Authors should provide as much relevant information as possible/available to allow reviewers to make an informed evaluation of the extended abstract.
 - Relevant figures, diagrams, or flowcharts that aid in understanding the technical approach are strongly encouraged.
 - Preliminary results are expected in the extended abstract and should be of sufficient quality to be presented with little to no additional content.
 - Authors should describe what additional work is required to finalize the manuscript, and the timeline by which this work is anticipated to be completed.
- **References:** A list of references used by the authors or relevant to the proposed work must be provided. All such references must be cited in the extended abstract.

- Abstracts with scores in one or more red boxes will be rejected regardless of scores in any other major or sub-category

	Poor	Below Average	Average	Above Average	Excellent
Technical Quality <i>How strong/deep is the technical content of the abstract?</i>					
Accuracy (40%)	Multiple errors in the equations, claims, tables, or figures		Minor errors in equations, claims, tables, or figures		No obvious errors in equations, claims, tables, or figures
References (20%)	Pervasive lack of appropriate citations in the technical literature to support claims made in abstract		Majority of claims supported by data or cited literature		All claims supported by references cited or new data
Technical Challenges (40%)	Author does not demonstrate an understanding of the technical challenges		Obvious technical challenges are clearly identified and addressed		All technical challenges are clearly identified and addressed
Importance/Relevance to Field <i>How important is the (proposed) scientific advancement to science and the aerospace community?</i>					
Motivation (40%)	Abstract does not motivate work		Motivation present		Clear and well-articulated motivation
Interest (60%)	Little to no new or significant scientific content of interest to the field		Topic of interest to government, industry, or academia		Topic of wide interest to government, industry, AND academia
Originality <i>How novel is the (proposed) scientific advancement?</i>					
Knowledge Advancement (50%)	Abstract does not advance knowledge in the field		Abstract advances prior work by the authors		Abstract synthesizes work from multiple research groups to produce a novel advancement
Methodology/Analysis (50%)	Work conducted with standard methods without significant change in technical approach or interpretation		Non-trivial technical approach or interpretation of technical results		A clear paradigm shift with respect to new results or a novel method
Conciseness/Style/Clarity <i>How easy is it to extract information from the abstract?</i>					
Grammar/Spelling (40%)	Persistent grammar/spelling errors		Minor grammar/spelling errors		No grammar/spelling errors
Formatting/Narrative (60%)	No attempt to follow AIAA template. No coherent narrative.		Major template sections present. Readable abstract with occasional inconsistencies in evenness of writing.		No formatting issues. Results presented clearly and succinctly.
Potential to be a Good Paper <i>How complete is the abstract compared to the full paper?</i>					
Results (60%)	No new results		Preliminary results included		Completed results included
Work to Complete Manuscript (40%)	Work to complete manuscript not defined or not achievable in available timeframe		Clearly defined and achievable goals for final manuscript		Abstract nearly represents completed paper