ATCA OBSERVATIONS OF MY FAVOURITE OBJECT

Below are some suggested headings to use in your scientific justification, along with some guidelines on what the ATNF Time Assignment Committee (TAC) looks for when reading proposals. Authors are free to update section headings to suit their science case. Note that this template is provided as a guide; authors are ultimately responsible for ensuring that their proposal meets the conditions outlined in the call for proposals and in the OPAL Users Guide (https://opal.atnf.csiro.au/). This template has been tested in overleaf, but not with other LaTeX packages.

Background and Scientific Justification

Set the scene and provide some 'bigger picture' background information on why this proposal should be awarded time. This should be aimed at an astronomer who is not necessarily an expert in the field.

Proposed Observations

Describe the proposed observations and outline how these would achieve the stated science goals.

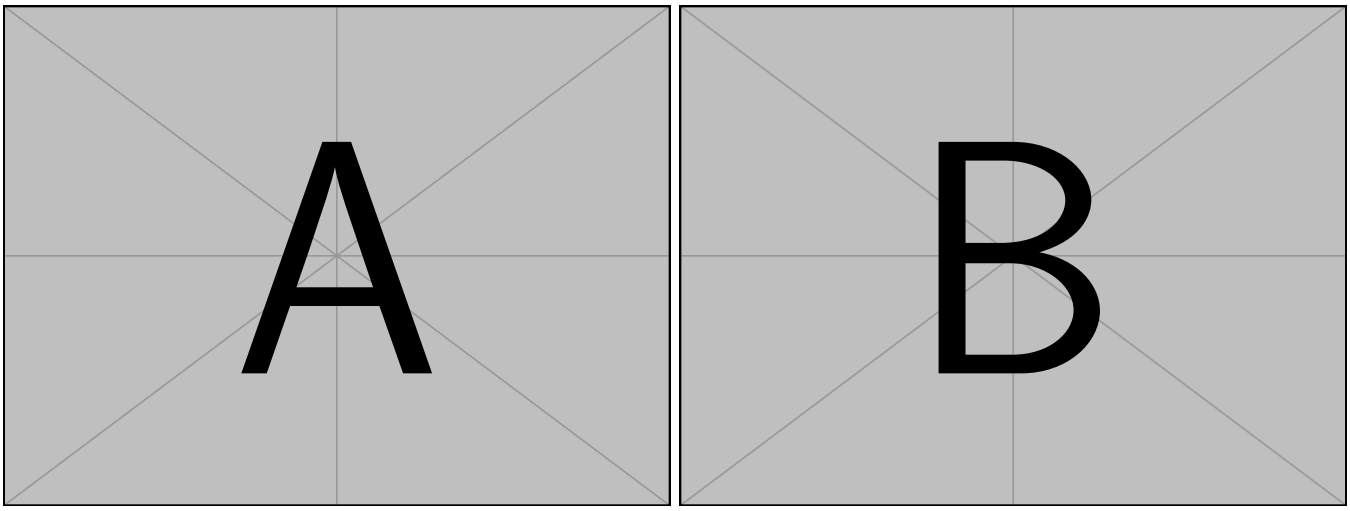
Technical Justification and Feasibility

Outline the technical aspects of the proposal including S/N calculations, justify facility and observing parameters (e.g. is this the best telescope to do these observations, are the frequencies proposed appropriate to achieve the science goals?). An outline of the observation strategy (including calibration overheads) should also be included here.

How to add citations and references list

A separate .bib and .bst file have been included with this template. BibTeX entries should be added to your .bib file. Make sure that the `[numbers]` option is listed when including the `natbib` package at the beginning of this template to give you numeric citations. Citations can then be included in the text using the '`\cite`' command e.g. [1, 2].

Example text



(a) Subfigure A caption (b)

Figure 1: Figure caption with reference to (a) and (b).

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References: [1] Greenwade, G. D. 1993, TUGBoat, 14, 342. [2] Wilson et al. 2011, MNRAS, 416, 832.

Tips for writing the scientific justification

The ATNF TAC grades proposals based on information provided in three broad areas. Below are some example questions to think about when writing scientific and technical justifications.

Background and Significance:

- Does the proposal set the scene and provide sufficient background information about the field?
- What are the major outstanding questions that this proposal might try to address?
- Is this pitched at the level of a non-expert? Is there limited jargon/acronyms?
- Does the proposal have a well-written abstract and outreach statement?

Proposal goals and scope:

- Does the proposal clearly state the goals/objectives of the proposed observations?
- How will these observations impact the field? How will this project contribute to overall scientific progress of the field? (i.e. how does it fit into the bigger picture)?
- How well do the specific goals address the big science questions listed in the previous criterion?
- In the case of a detection experiment, will a non-detection still provide useful constraints/limits?
- Is the sample/target selection well-justified (e.g. sample size, any selection effects that may bias the results)
- If a single object proposal, how does this relate to the larger population? Why this source?
- For NAPAs are the trigger conditions clearly explained?

Feasibility and Appropriateness:

- Is the required sensitivity/total time request clearly justified?
- Do the proposed observations follow a sensible observing strategy to achieve the science goals? Have the most appropriate frequencies/feeds/array configurations been proposed?
- Is there sufficient calibration? Will the observations likely be strongly impacted by RFI (and has this been taken into account?)
- Does the proposal motivate the use of this particular facility?
- Does the data already exist (either observed by large surveys or in the archive)?