A sample document long title

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Abstract

Avoid notations; avoid citations; no exceeding 250 words.

Keywords   *LaTeX; Sample*

1   Introduction

This is a template for both the review version and the production version of JDS articles. They corresponds to two options of document class `jds`: `review` and `inpress`.

The introduction needs to answer three questions:

1. Why should we care about this research (its importance)?
2. What have been done in the literature (identify a gap)?
3. What are new (your contributions)?

A quick checklist on styles:

1. Each equation in display is part of a sentence, which needs to be punctuated as appropriate.
2. Put negative signs in math mode; otherwise it is just a dash.
3. Use the right citation command to distinguish textual and parenthetical citations.
4. Generate statistical graphics as vector graphics instead of raster graphics; the latter blurs when zoomed in.
5. Put journal/book titles in title style in bibtex.
6. Protect upper cases in special words such as {MCMC}, {B}ayesian, {G}aussian, etc.
7. Look up and cite the latest journal versions of preprints.

2   Citing literatures

When citing literatures, be sure to understand the difference of textual citations and parenthetical citations.

Example of textual citation: In their influential work, Carlin et al. (1992) introduced a new approach to Bayesian modeling, which has been widely adopted in statistical analysis.

Example of parenthetical citation: Recent studies have shown the effectiveness of this method in various applications (Gamado et al., 2014, 2017).

Mixed usage example: According to Carlin et al. (1992), machine learning techniques can be improved by incorporating domain-specific knowledge (see also Kotz et al., 2001).

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2.1 Equations

Dic, quaeso, mihi: quae est ista, quae consurgens ut aurora rutilat ut benefi-cam. Dic nam esta pulchra ut luna electa, ut sol replet laetitia terras, caelos.

$$\gamma^\mu = \begin{pmatrix} 0 & \sigma_+^\mu \\ \sigma_-^\mu & 0 \end{pmatrix}, \qquad \gamma^5 = \begin{pmatrix} -1 & 0 \\ 0 & 1 \end{pmatrix},$$

$$\sigma_\pm^\mu = (\mathbf{1}, \pm\sigma),$$

giving

$$\hat{a} = \begin{pmatrix} 0 & (\hat{a})_+ \\ (\hat{a})_- & 0 \end{pmatrix}, \quad (\hat{a})_\pm = a_\mu \sigma_\pm^\mu, \tag{1}$$

Two equations:

$$C_s = K_M \frac{\mu/\mu_x}{1 - \mu/\mu_x} \tag{2}$$

and

$$G = \frac{P_\text{opt} - P_\text{ref}}{P_\text{ref}} \, 100 \, (\%). \tag{3}$$

Long equation:

$$\begin{aligned}
\sum_{u \in C^+} \left\lfloor \frac{w'(u)}{m} \right\rfloor &\leqslant \left\lfloor \sum_{u \in C^+} \frac{w'(u)}{m} \right\rfloor \\
&\leqslant \left\lfloor \frac{r(v) + \sum_{u \in C^+} w(u)}{m} \right\rfloor = \left\lfloor \frac{w(v) - \sum_{u \in C^-} w(u)}{m} \right\rfloor \\
&\leqslant \left\lfloor \frac{w(v)}{m} \right\rfloor - \sum_{u \in C^-} \left\lfloor \frac{w(u)}{m} \right\rfloor = s(v) + \sum_{u \in C^+} \left\lfloor \frac{w(u)}{m} \right\rfloor
\end{aligned} \tag{4}$$

and

$$\begin{aligned}
\sum_{u \in C^-} \left\lfloor \frac{w(u)}{m} \right\rfloor &\leqslant \left\lfloor \sum_{u \in C^-} \frac{w(u)}{m} \right\rfloor \\
&\leqslant \left\lfloor \frac{r'(v) + \sum_{u \in C^-} w'(u)}{m} \right\rfloor = \left\lfloor \frac{w'(v) - \sum_{u \in C^+} w'(u)}{m} \right\rfloor \\
&\leqslant \left\lfloor \frac{w'(v)}{m} \right\rfloor - \sum_{u \in C^+} \left\lfloor \frac{w'(u)}{m} \right\rfloor = s'(v) + \sum_{u \in C^-} \left\lfloor \frac{w'(u)}{m} \right\rfloor.
\end{aligned} \tag{5}$$

This time we have

$$\begin{aligned}
f(S) - f(T) &= D_k^T \big(1 + C_{\geqslant k+1}^T\big)(1 + C) + C_k^T \big(1 + D_{\geqslant k+1}^T\big)(1 + D) \\
&\quad - C_k^T \big(1 + C_{\geqslant k+1}^T\big)(1 + C) - D_k^T \big(1 + D_{\geqslant k+1}^T\big)(1 + D) \\
&= \big(D_k^T - C_k^T\big)\big[(1 + C_{\geqslant k+1})(1 + C) - \big(1 + D_{\geqslant k+1}^T\big)(1 + D)\big] > 0.
\end{aligned} \tag{6}$$

Omnes hanc ergo sequamur qua cum gratia mereamur vitam aeternam. Consequamur. Quoniam con-fortavit seras portarum tuarum, benedixit filiis tuis in te Table 1.

Table 1: Table caption.

Star	Height	d_x	d_y	n	χ^2	R_{max}	R_{min}	P
1	33472.5	-0.1	0.4	53	27.4	2.065	1.940	3.900
2	27802.4	-0.3	-0.2	60	3.7	1.628	1.510	2.156
3	29210.6	0.9	0.3	60	3.4	1.622	1.551	2.159
4	32733.8	-1.2	-0.5	41	54.8	2.282	2.156	4.313
5	9607.4	-0.4	-0.4	60	1.4	1.669	1.574	2.343
6	31638.6	1.6	0.1	39	315.2	3.433	3.075	7.488

Figure 1: Nisi custodierit civitatem, frustra vigilat qui custodit eam. Vanum est vobis ante lucem surgere: surgite postquam sederitis, qui manducatis panem doloris.

3 A longer head one limited only by the author's imagination

Nisi custodierit civitatem, frustra vigilat qui custodit eam. Vanum est vobis ante lucem surgere: surgite postquam sederitis, qui manducatis panem doloris.

3.1 Average head two

3.1.1 Followed by a three-head

A Short Head Three leads into paragraph, ui posuit fines tuos pacem, et adipe frumenti satiat te. Qui dat nivem sicut lanam, nebulam sicut cinerem spargit.

A short head four   Ui posuit fines tuos pacem, et adipe frumenti satiat te. Emittet verbum suum, et liquefaciet ea; flabit spiritus eius, et fluent aquae (see Figure 1).

A short head five leads into paragraph   Ui posuit fines tuos pacem, et adipe frumenti satiat te. Qui emittit eloquium suum terrae; velociter currit sermo eius.

4 Environments

4.1 Enumerate

Nationi, et iudicia sua non manifestavit eis. Et exultavit spiritus meus in salutari meo.

1. Numbered list. Vanum est vobis ante lucem surgere: surgite postquam sederitis, qui manducatis panem doloris.
2. Numbered list cum dederit dilectis suis somnum.
   (a) Numbered list. Vanum est vobis ante lucem surgere: surgite postquam sederitis, qui manducatis panem doloris.
   (b) Numbered list cum dederit dilectis suis somnum.
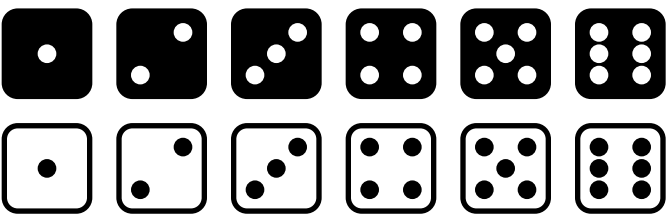   (c) Numbered list cce haereditas filii: merces, fructus ventris.

Figure 2: Nisi custodierit civitatem.

Table 2: One-column table.

Wavelength range	0.35–1.7 µm
Telescope aperture	2 m
Effective focal length	21.66 m
Field of view	1.5 deg
	0.7 square degree
Detectors:	CCD
	(10 µm pixel)
	NIR HgCdTe arrays,
	(18 µm pixel)
Survey field size	15 square deg
FVR	4 days
FOT survey	60%
FOT spectroscopy	40%

3. Numbered list cce haereditas filii: merces, fructus ventris.

Figure 2 sicut sagittae in many potentis: ita filii excussorum. Beatus vir qui implevit desiderium suum ex pisis: non confundetus cum loquetur inimicis suis in porta.

4.2   Itemize

Beatus vir qui implevit desiderium suum ex pisis: non confundetus cum loquetur inimicis suis in porta. Sicut erat in principio et nunc et semper, et in saecula non confundetus cumsaeculorum.

- An example of a bulleted list (itemize). Et exultavit spiritus meus in salutari meo. Quia respexit humilitatem ancillae.
- Second item in a bulleted list. Emittet verbum suum, et liquefaciet ea; flabit spiritus eius, et fluent aquae.
- Third and final item in a bulleted list. Sagittae in many potentis: ita filii excussorum. Beatus vir qui implevit desiderium suum ex pisis: non confundetus cum loquetur inimicis suis in porta.

Beatus vir qui implevit desiderium suum ex pisis: non confundetus cum loquetur inimicis suis in porta. Sicut erat in principio et nunc et semper, et in saecula non confundetus cumsaeculorum. Dic, quaeso, mihi: quae est ista, quae consurgens ut aurora rutilat ut beneficam (Table 2).

4.3 Quote, description, etc.

Sicut sagittae in many potentis: ita filii excussorum. Beatus vir qui implevit desiderium suum ex pisis: non confundetus cum loquetur inimicis suis in porta.

> Extract sample (quotation). Vanum est vobis ante lucem surgere: surgite postquam sederitis, qui manducatis panem doloris. Praestet nobis deus, pater hoc et filius et mater praestet nobis.
>
> Nisi custodierit civitatem, frustra vigilat qui custodit eam. Cum dederit dilectis suis somnum: ecce haereditas filii: merces, fructus ventris. Sicut sagittae in many potentis: Ita filii excussorum.

Sicut sagittae in many potentis: ita filii excussorum. Beatus vir qui implevit desiderium suum ex pisis: non confundetus cum loquetur inimicis suis in porta.

> Extract sample (quote). Vanum est vobis ante lucem surgere: surgite postquam sederitis, qui manducatis panem doloris. Praestet nobis deus, pater hoc et filius et mater praestet nobis.
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Sicut sagittae in many potentis: ita filii excussorum. Beatus vir qui implevit desiderium suum ex pisis: non confundetus cum loquetur inimicis suis in porta.

Description label. Vanum est vobis ante lucem surgere: surgite postquam sederitis, qui manducatis panem doloris. Praestet nobis deus, pater hoc et filius et mater praestet nobis.

Description label. Nisi custodierit civitatem, frustra vigilat qui custodit eam. Cum dederit dilectis suis somnum: ecce haereditas filii: merces, fructus ventris. Sicut sagittae in many potentis: Ita filii excussorum.

5 Theorems

Beatus vir qui implevit desiderium suum ex pisis: non confundetus cum loquetur inimicis suis in porta.

Theorem 1 (Quantitative theorem). *Quae semper tutum est medium inter homines et deum, pro culpis remedium.*

Remark 1 (Quantitative theorem). Quae semper tutum est medium inter homines et deum, pro culpis remedium.

Definition 1 (Quantitative theorem). Quae semper tutum est medium inter homines et deum, pro culpis remedium.

Proof. The theorem is proved. □

Dic, quaeso, mihi: quae est ista, quae consurgens ut aurora rutilat ut benefi-cam. Dic nam esta pulchra ut luna electa, ut sol replet laetitia terras, caelos.

Theorem 2. *Nisi custodierit civitatem, frustra vigilat qui custodit eam. Cum dederit dilectis suis somnum: ecce haereditas filii: merces, fructus ventris. Sicut sagittae in many potentis: Ita filii excussorum.*

Lemma 1. *Maria virgo illa dulcis, praedicata de propheta porta orientalis. Tempus puta-tionis advenit. Illa sacra et felix porta, per quam mors fuit expulsa, introduxit autem vitam.*

Supplementary Material

Some additional simulation results and a compressed folder with the code to simulate the settings with 5 moderators (5M), implement our proposed methods, and some existing methods are provided as the online Supplementary Material.

A   Appendix section

Nisi custodierit civitatem, frustra vigilat qui custodit eam. Cum dederit dilectis suis somnum: ecce haereditas filii: merces, fructus ventris. Sicut sagittae in many potentis: Ita filii excussorum.

Acknowledgments

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