PTEP

Prog. Theor. Exp. Phys. **2015**, 00000 (5 pages)
DOI: 10.1093/ptep/0000000000

Insert the article title here

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Subject Index xxxx, xxx

1. Insert A head here

This demo file is intended to serve as a "starter file" for ptephy journal papers produced under LaTeX using `ptephy_v1.cls` v0.1

1.1. Insert B head here

Subsection text here.

1.1.1. Insert C head here. Subsubsection text here.

2. Equations

Sample equations.

$$\begin{aligned}\frac{\partial u(t,x)}{\partial t} &= Au(t,x)\left(1-\frac{u(t,x)}{K}\right) - B\frac{u(t-\tau,x)w(t,x)}{1+Eu(t-\tau,x)},\\ \frac{\partial w(t,x)}{\partial t} &= \delta\frac{\partial^2 w(t,x)}{\partial x^2} - Cw(t,x) + D\frac{u(t-\tau,x)w(t,x)}{1+Eu(t-\tau,x)},\end{aligned} \tag{1}$$

$$\begin{aligned}\frac{dU}{dt} &= \alpha U(t)(\gamma - U(t)) - \frac{U(t-\tau)W(t)}{1+U(t-\tau)},\\ \frac{dW}{dt} &= -W(t) + \beta\frac{U(t-\tau)W(t)}{1+U(t-\tau)}.\end{aligned} \tag{2}$$

[†]These authors contributed equally to this work

$$\frac{\partial(F_1,F_2)}{\partial(c,\omega)}_{(c_0,\omega_0)} = \left| \begin{array}{cc} \frac{\partial F_1}{\partial c} & \frac{\partial F_1}{\partial \omega} \\ \frac{\partial F_2}{\partial c} & \frac{\partial F_2}{\partial \omega} \end{array} \right|_{(c_0,\omega_0)} = -4c_0q\omega_0 - 4c_0\omega_0p^2 = -4c_0\omega_0(q+p^2) > 0.$$

3. Enunciations

Theorem 1. *Assume that $\alpha > 0, \gamma > 1, \beta > \frac{\gamma+1}{\gamma-1}$. Then there exists a small $\tau_1 > 0$, such that for $\tau \in [0, \tau_1)$, if c crosses $c(\tau)$ from the direction of to a small amplitude periodic traveling wave solution of (2.1), and the period of $(\check{u}^p(s), \check{w}^p(s))$ is*

$$\check{T}(c) = c \cdot \left[\frac{2\pi}{\omega(\tau)} + O(c - c(\tau)) \right].$$

Condition 1. *From (0.8) and (2.10), it holds $\frac{d\omega}{d\tau} < 0, \frac{dc}{d\tau} < 0$ for $\tau \in [0, \tau_1)$. This fact yields that the system (2.1) with delay $\tau > 0$ has the periodic traveling waves for smaller wave speed c than that the system (2.1) with $\tau = 0$ does. That is, the delay perturbation stimulates an early occurrence of the traveling waves.*

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4. Figures & Tables

The output for figure is:

Fig. 1 Insert figure caption here

An example of a double column floating figure using two subfigures. (The subfig.sty package must be loaded for this to work.) The subfigure `\label` commands are set within each subfloat command, the `\label` for the overall figure must come after `\caption`. `\hfil` must be used as a separator to get equal spacing. The subfigure.sty package works much the same way, except `\subfigure` is used instead of `\subfloat`.

The output for table is:

Table 1 An Example of a Table.

One	Two
Three	Four

5. Conclusion

The conclusion text goes here.

Acknowledgment

Insert the Acknowledgment text here.

References

[1] J. P. Blaizot, and E. Iancu, Phys. Rep. **359**, 355 (2002).
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A. Appendix head

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$$a + b = c \tag{A1}$$

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Table A1 An Example of a Table.

One	Two
Three	Four

A.1. Appendix subhead

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$$a + b = c \tag{A2}$$

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Fig. A1 Figure caption

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$$a + b = c \tag{A3}$$

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B. Appendix heading

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$$a + b = c \tag{B1}$$

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$$a + b = c \tag{B2}$$

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Fig. B1 Figure caption

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Fig. B2 Figure caption

Table B1 An Example of a Table.

One	Two
Three	Four

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