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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 L^AT_EX using `ptephy_v1.cls` v0.1

1.1 Insert B head here

Subsection text here.

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2 Equations

Sample equations.

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

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

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

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 $\frac{dw}{d\tau} < 0$, $\frac{dc}{d\tau} < 0$ 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.

For references, note how to include DOI information from examples below.

References

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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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