



```

\documentclass[12pt,leqno]{article}
\usepackage{pstricks,pst-node}
\newcommand{\ds}{\displaystyle}
\begin{document}

\[
\begin{psmatrix}[colsep=2cm,rowsep=2cm]
& & & \Gamma \\
& & & \\
\tilde{X} & \{\ds \tilde{\Gamma}_k\} & & \\
X & \{\ds \Gamma_k\} & & \\
\psset{arrows=->,labelsep=3pt,nodesep=3pt}
\ncarc[arcangle=-20]{1,3}{2,1}^{\tilde{p}_k}
\nclice{1,3}{2,2}
\ncput*{\varphi}
\ncarc[arcangle=20]{1,3}{3,2}>{p_{\Gamma_k}}
\nclice{2,2}{2,1}^{\tilde{p}_k}
\nclice{2,1}{3,1}<{p_X}
\nclice{2,2}{3,2}<{\tilde{\Gamma}_k}
\nclice{3,2}{3,1}^{\tilde{p}_k}
\end{psmatrix}
\]

```