

## Cheat sheet for pst-optexp (v3.0)

labeloffset= $\langle num \rangle$   
labelstyle= $\langle macros \rangle$   
labelalign= $\langle refpoint \rangle$   
labelangle= $\langle num \rangle$   
labelref=relative, relgrav, global  
label= $\langle offset \rangle$  [ $\langle angle \rangle$ ] [ $\langle refpoint \rangle$ ] [ $\langle labelref \rangle$ ]]  
innerlabel=true  
position= $\langle num \rangle$ , start, end  
abspos= $\langle num \rangle$ , start, end  
angle= $\langle num \rangle$   
rotateref= $\langle refpoint \rangle$   
compshift= $\langle num \rangle$   
OptComp $\langle psstyle \rangle$   
OptionalStyle $\langle psstyle \rangle$   
VariableStyle $\langle psstyle \rangle$   
addtoOptComp= $\langle list \rangle$   
newOptComp= $\langle list \rangle$   
optional=true, false

$\backslash$ lens [ $\langle opt \rangle$ ] ( $\langle in \rangle$ ) ( $\langle out \rangle$ ) { $\langle label \rangle$ }  
lensheight= $\langle num \rangle$   
lensradiusleft= $\langle num \rangle$   
lensradiusright= $\langle num \rangle$   
lensradius= $\langle left \rangle$  [ $\langle right \rangle$ ]  
lenswidth= $\langle num \rangle$   
lens= $\langle radiusleft \rangle$  [ $\langle radiusright \rangle$ ] [ $\langle height \rangle$ ] [ $\langle width \rangle$ ]]  
thicklens=true, false

$\backslash$ optplate [ $\langle opt \rangle$ ] ( $\langle in \rangle$ ) ( $\langle out \rangle$ ) { $\langle label \rangle$ }  
plateheight= $\langle num \rangle$   
platelinewidth= $\langle num \rangle$  or  $\langle dimen \rangle$

$\backslash$ optretplate [ $\langle opt \rangle$ ] ( $\langle in \rangle$ ) ( $\langle out \rangle$ ) { $\langle label \rangle$ }  
platewidth= $\langle num \rangle$   
platesize= $\langle width \rangle$   $\langle height \rangle$

$\backslash$ pinhole [ $\langle opt \rangle$ ] ( $\langle in \rangle$ ) ( $\langle out \rangle$ ) { $\langle label \rangle$ }  
outerheight= $\langle num \rangle$   
innerheight= $\langle num \rangle$   
phlinewidth= $\langle num \rangle$  or  $\langle dimen \rangle$   
phwidth= $\langle num \rangle$

$\backslash$ optbox [ $\langle opt \rangle$ ] ( $\langle in \rangle$ ) ( $\langle out \rangle$ ) { $\langle label \rangle$ }  
optboxwidth= $\langle num \rangle$   
optboxheight= $\langle num \rangle$   
optboxsize= $\langle width \rangle$   $\langle height \rangle$

$\backslash$ crystal [ $\langle opt \rangle$ ] ( $\langle in \rangle$ ) ( $\langle out \rangle$ ) { $\langle label \rangle$ }  
crystalwidth= $\langle num \rangle$   
crystalheight= $\langle num \rangle$   
crystalsize= $\langle width \rangle$   $\langle height \rangle$   
caxislength= $\langle num \rangle$   
caxisinv=true, false  
voltage=true, false  
lamp=true, false  
lampscale= $\langle num \rangle$   
CrystalCaxis $\langle psstyle \rangle$   
CrystalLamp $\langle psstyle \rangle$

$\backslash$ optdetector [ $\langle opt \rangle$ ] ( $\langle in \rangle$ ) ( $\langle out \rangle$ ) { $\langle label \rangle$ }  
detsize= $\langle num \rangle$  or  $\langle width \rangle$   $\langle height \rangle$   
detype=round, diode  
DetectorStyle $\langle psstyle \rangle$

$\backslash$ optdiode [ $\langle opt \rangle$ ] ( $\langle in \rangle$ ) ( $\langle out \rangle$ ) { $\langle label \rangle$ }  
optdiodesize= $\langle num \rangle$

$\backslash$ doveprism [ $\langle opt \rangle$ ] ( $\langle in \rangle$ ) ( $\langle out \rangle$ ) { $\langle label \rangle$ }  
doveprismsize= $\langle num \rangle$  or  $\langle width \rangle$   $\langle height \rangle$

$\backslash$ polarization [ $\langle opt \rangle$ ] ( $\langle in \rangle$ ) ( $\langle out \rangle$ ) { $\langle label \rangle$ }  
polsize= $\langle num \rangle$   
pollineewidth= $\langle num \rangle$  or  $\langle dimen \rangle$   
poltype=parallel, perp, misc, lcirc, rcirc  
Polarization $\langle psstyle \rangle$

$\backslash$ mirror [ $\langle opt \rangle$ ] ( $\langle in \rangle$ ) ( $\langle center \rangle$ ) ( $\langle out \rangle$ ) { $\langle label \rangle$ }  
mirrorwidth= $\langle num \rangle$   
mirrorlinewidth= $\langle num \rangle$  or  $\langle dimen \rangle$   
mirrorradius= $\langle num \rangle$   
mirrortype=plain, piezo, extended, semitrans  
variable=true, false  
mirrordepth= $\langle num \rangle$   
ExtendedMirror $\langle psstyle \rangle$   
PiezoMirror $\langle psstyle \rangle$   
SemitransMirror $\langle psstyle \rangle$

$\backslash$ beamsplitter [ $\langle opt \rangle$ ] ( $\langle in \rangle$ ) ( $\langle center \rangle$ ) ( $\langle out \rangle$ ) { $\langle label \rangle$ }  
bssize= $\langle num \rangle$   
bsstyle=cube, plate

$\backslash$ optgrating [ $\langle opt \rangle$ ] ( $\langle in \rangle$ ) ( $\langle center \rangle$ ) ( $\langle out \rangle$ ) { $\langle label \rangle$ }  
gratingwidth= $\langle num \rangle$   
gratingheight= $\langle num \rangle$   
gratingdepth= $\langle num \rangle$   
gratingcount= $\langle int \rangle$   
gratingtype=blazed, binary  
reverse=true, false  
gratinglinewidth= $\langle num \rangle$  or  $\langle dimen \rangle$

$\backslash$ optprism [ $\langle opt \rangle$ ] ( $\langle in \rangle$ ) ( $\langle center \rangle$ ) ( $\langle out \rangle$ ) { $\langle label \rangle$ }  
prismsize= $\langle num \rangle$   
prismangle= $\langle num \rangle$   
prismalign=auto, center

$\backslash$ rightangleprism [ $\langle opt \rangle$ ] ( $\langle in \rangle$ ) ( $\langle center \rangle$ ) ( $\langle out \rangle$ ) { $\langle label \rangle$ }  
raprismsize= $\langle num \rangle$

$\backslash$ pentaprism [ $\langle opt \rangle$ ] ( $\langle in \rangle$ ) ( $\langle center \rangle$ ) ( $\langle out \rangle$ ) { $\langle label \rangle$ }  
pentaprismsize= $\langle num \rangle$   
  
usefiberstyle=true, false

$\backslash$ optfiber [ $\langle opt \rangle$ ] ( $\langle in \rangle$ ) ( $\langle out \rangle$ ) { $\langle label \rangle$ }  
fiberloops= $\langle int \rangle$   
fiberloopradius= $\langle num \rangle$   
fiberloopsep= $\langle num \rangle$

$\backslash$ optamp [ $\langle opt \rangle$ ] ( $\langle in \rangle$ ) ( $\langle out \rangle$ ) { $\langle label \rangle$ }  
optampsize= $\langle num \rangle$  or  $\langle width \rangle$   $\langle height \rangle$

$\backslash$ optmzm [ $\langle opt \rangle$ ] ( $\langle in \rangle$ ) ( $\langle out \rangle$ ) { $\langle label \rangle$ }  
optmzmsize= $\langle num \rangle$  or  $\langle width \rangle$   $\langle height \rangle$

$\backslash$ polcontrol [ $\langle opt \rangle$ ] ( $\langle in \rangle$ ) ( $\langle out \rangle$ ) { $\langle label \rangle$ }  
polcontrolsize= $\langle num \rangle$   
polcontroltype=linear, triangle

$\backslash$ optisolator [ $\langle opt \rangle$ ] ( $\langle in \rangle$ ) ( $\langle out \rangle$ ) { $\langle label \rangle$ }  
isolatorsizes= $\langle num \rangle$  or  $\langle width \rangle$   $\langle height \rangle$   
IsolatorArrow $\langle psstyle \rangle$

$\backslash$ optswitch [ $\langle opt \rangle$ ] ( $\langle in \rangle$ ) ( $\langle out \rangle$ ) { $\langle label \rangle$ }  
switchsize= $\langle num \rangle$

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switchstyle=opened, closed

\fiberdelayline[⟨opt⟩](⟨in⟩)(⟨out⟩){⟨label⟩}
  fdlsiz=⟨num⟩ or ⟨width⟩ ⟨height⟩
  FdlArrow⟨psstyle⟩

\optfiberpolarizer[⟨opt⟩](⟨in⟩)(⟨out⟩){⟨label⟩}
  fiberpolsize=⟨num⟩ or ⟨width⟩ ⟨height⟩

\optcirculator(⟨left⟩)(⟨right⟩)(⟨bottom⟩){⟨label⟩}
  optcircsize=⟨num⟩
  optcircangleA=⟨num⟩
  optcircangleB=⟨num⟩
  optcircangle=⟨num⟩ ⟨num⟩
  OptCircArrow⟨psstyle⟩

\optcoupler(⟨tl⟩)(⟨bl⟩)(⟨tr⟩)(⟨br⟩){⟨label⟩}
\wdmcoupler(⟨tl⟩)(⟨bl⟩)(⟨r⟩){⟨label⟩}
\wdmsplitter(⟨l⟩)(⟨tr⟩)(⟨br⟩){⟨label⟩}
  couplersize=⟨num⟩ or ⟨width⟩ ⟨height⟩
  couplersep=⟨num⟩
  couplertype=none, ellipse, rectangle, cross
  coupleralign=t, top, b, bottom, c, center
  align=top, bottom, center
  VariableCoupler⟨psstyle⟩

\optfilter[⟨opt⟩](⟨in⟩)(⟨out⟩){⟨label⟩}
  filtersize=⟨num⟩
  filtertype=bandpass, bandstop, lowpass,
    highpass
  FilterStyle⟨psstyle⟩

\fibercollimator(⟨in⟩)(⟨A⟩)(⟨B⟩)(⟨out⟩){⟨label⟩}
  fibercolsize=⟨num⟩ or ⟨width⟩ ⟨height⟩

\oenode{⟨node⟩}{⟨comp⟩}
  namingscheme=old, new
  showoptdots=true, false
  compname=⟨string⟩

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\oenodeRefA{⟨comp⟩}
\oenodeRefB{⟨comp⟩}
\oenodeTrefA{⟨comp⟩}
\oenodeTrefB{⟨comp⟩}
\oenodeCenter{⟨comp⟩}
\oenodeLabel{⟨comp⟩}
\oenodeExt{⟨comp⟩}
  extnode=⟨refpoint⟩
  extnodealign=rel, relative, abs, absolute

\oenodeIfc{⟨num⟩}{⟨comp⟩}
\oenodeIn{⟨comp⟩}
\oenodeOut{⟨comp⟩}
\oenodeRotref{⟨comp⟩}
\oenodeBeam{⟨num⟩}
\oenodeBeamUp{⟨num⟩}
\oenodeBeamLow{⟨num⟩}

\drawbeam[⟨options⟩]{⟨obj1⟩}{⟨obj2⟩}...
  raytrace=true, false
  useNA=true, false
  n=⟨code⟩
  refractiveindex=⟨code⟩
  beampos=[⟨x⟩]⟨y⟩
  beamangle=⟨pscode⟩
  beamalign=rel, relative, abs, absolute
  beaminside=true, false
  beaminsidefirst=true, false
  beaminsidelast=true, false
  allowbeaminside=true, false

\optplane(⟨center⟩)
  beam=true, false
  conn=⟨string⟩
  Beam⟨psstyle⟩
  addtoBeam=⟨list⟩
  newBeam=⟨list⟩
  ArrowInsideMinLength=⟨pscode⟩

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ArrowInsideMaxLength=⟨pscode⟩

\drawwidebeam[⟨options⟩]{⟨obj1⟩}{⟨obj2⟩}...
  beamwidth=⟨pscode⟩
  beamdiv=⟨pscode⟩
  pswarning=true, false
  savebeampoints=true, false, ⟨int⟩
  loadbeampoints=true, false, ⟨int⟩
  savebeam=true, false
  loadbeam=true, false
  startinside=true, false
  stopinside=true, false

\drawfiber[⟨options⟩]{⟨obj1⟩}{⟨obj2⟩}...
  fiberalign=rel, relative, center, abs,
    absolute
  fiberangleA=⟨num⟩
  fiberangleB=⟨num⟩
  startnode=auto, N, 1, 2, ...
  stopnode=auto, N, 1, 2, ...
  Fiber⟨psstyle⟩
  addtoFiber=⟨list⟩
  newFiber=⟨list⟩
  fiberstyle=⟨string⟩
  fiber=[*+]none, all, i, o, ⟨refpoint⟩
  \begin{optexp}...\end{optexp}

\backlayer{⟨code⟩}
\frontlayer{⟨code⟩}

\optdipole[⟨opt⟩](⟨in⟩)(⟨out⟩){⟨label⟩}
\opttripole[⟨opt⟩](⟨in⟩)(⟨center⟩)(⟨out⟩){⟨label⟩}
\newOptexpDipole[⟨fixopt⟩]{⟨name⟩}{⟨dftopt⟩}
\newOptexpTripole[⟨fixopt⟩]{⟨name⟩}{⟨dftopt⟩}
\newOptexpFiberDipole[⟨fixopt⟩]{⟨name⟩}{⟨dftopt⟩}

  showifcnodes=true, false
  IfcNodeStyle⟨psstyle⟩

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