Scientific Poster with TikZ

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Starting

Start with the following document:

```
\documentclass{a0poster}
\usepackage{tikzposter} % here most of the things are defined

% change parameters only after this line

\usepackage[margin=\margin  cm, paperwidth=84.1cm, paperheight=118.9cm]{ geometry}

\title{Title}
\author{Author\\Institution\\\texttt{email}}
\begin{document}
\AddToShipoutPicture{\BackgroundPicture}

\noindent
\begin{tikzpicture}
\initializesizeandshifts

\titleblock{50}{1}
\blocknode{Block Title}{Block Content}
\startsecondcolumn
\blocknode{Block Title 2}{Block Content 2}
\end{tikzpicture}
\end{document}
```

Macro for creating a block node:

\blocknode{Block Title}{Block Content}

Macro \blocknode has three parameters. The first one is optional and it is the position of the block. The first block will be automatically placed to ($(firstrow)-(xshift)-(yshift)$), which is the left corner below the title block. In most of the templates, (firstrow) is set to (title.south), where *title* is the alias for the title block. Each subsequent block is automatically placed to [($(box.south)-(yshift)$)], i.e., below the previous block aliased *box*. You can also use an explicit parameter, e.g., (−10, 30) (note that (0,0) is the center of the poster). The second parameter is the title of the block. Finally, the last parameter is the actual content.

Making Title

To make title, use the standard commands \title and \author in the preamble, and then the following macro:

\titleblock{50}{1.5}

Macro \titleblock has three parameters. The first one is optional and it specifies the shift of the title block w.r.t. its default position, which is set to ($0.5*(0,\paperheight)-(0,\margin)$). The second parameter is the width of the title block, and the third parameter is the scaling ratio (to make the title bigger or smaller).

The syntax for specifying authors is similar to the one in aaai.sty. Author information can be set in various styles: For several authors from the same institution:

```
\author{Author 1 \and ... \and Author n \\
Address line \\ ... \\ Address line}
```

If the names do not fit well on one line use

```
\author{Author 1 \\ {\bf Author 2} \\ ... \\ {\bf Author n} \\
Address line \\ ... \\ Address line}
```

For authors from different institutions:

```
\author{Author 1 \\ Address line \\ ... \\ Address line
\And ... \And
Author n \\ Address line \\ ... \\ Address line}
```

To start a separate "row" of authors use \AND, as in

```
\author{Author 1 \\ Address line \\ ... \\ Address line \AND
Author 2 \\ Address line \\ ... \\ Address line \And
Author 3 \\ Address line \\ ... \\ Address line}
```

(though, I must say \and ... \and did not work for me with more than 2 authors, so just use commas where you need if it does not work for you either).

Variable Width Block Nodes

You can also create blocks of arbitrary width

\blocknodew[coordinate]{Block width}{Block Title}{Block Content}

In this case it is better to specify coordinate manually if you want to have blocks aligned vertically.

Note that (xshift) and (yshift) are coordinates created in macro \initializesizeandshifts, and they allow to have relative positioning of block nodes in an automatic fashion. If you want to define your own shifts, set new values for (xshift) and (yshift) using commands \setxshift and \setyshift.

Also, it might be useful to know the y-coordinate of the south border of the previous block. You can retrieve it by using the command

\getcurrentrow{box} or \getcurrentrow{note}

This coordinate will be stored in (currentrow), which can be used to specify the location of the next block node.

Block Nodes in the Second Column

To start the second column or the third column use commands

\startsecondcolumn, and \startthirdcolumn.

If the number of columns is 2, then the last command will not have effect.

You can also start a new column with an arbitrary x-coordinate by specifying explicitly the coordinate of the new block node as follows:

\blocknode[($(firstrow)-(yshift)+(x,0)$)]{Block Title}{Block Content}

Colored Boxes Inside Block Nodes

There are three types of colored boxes/blocks that you can use inside block nodes to highlight information.

Theorem
Statement
\innerblock{Theorem}{Statement}

Text
\innerblockplain[colorone!80!]{Text}

Text
\coloredbox{colorthree!50!}{Text}

There are also callout nodes that allow for a more interesting layout of the poster.

\calloutnode[rotate angle]{from coordinate}{coordinate}{Node Width}{Node Content}

The alias for such nodes is *note*.

Plain nodes These nodes are similar to callout nodes. They allow for specifying the title of the node.

\plainnode[rotate angle]{coordinate}{Node Width}{Node Title}{Node Content}

Personalizing the Poster

It is possible to adjust the layout of the poster. To impose your own setting, you can use these macros:

- Macros for changing sizes

  \setmargin{4}, \setheaddrawingheight{14}, \setinstituteshift{10}, \setblockspacing{2}, \setblocktitleheight{3}

- Other structural macros

  \setcolumnnumber{3}, \usetemplate{5}, \usecolortemplate{4}, \usebackgroundtemplate{5}, \usetitletemplate{2}, \useblocknodetemplate{5}, \useinnernodetemplate{3}, \useplainnodetemplate{4}

- Macro for adding logos to the title block

  \addlogo[south west]{(0,0)}{6cm}{filename}

- Macros for the basic colors

  \setfirstcolor{green!70!}, \setsecondcolor{gray!80!}, \setthirdcolor{red!80!black}

- Macros for specific colors:

  \setbackgrounddarkcolor{colorone!70!black}, \setbackgroundlightcolor{colorone!70!}, \settitletextcolor{textcolor}, \settitlefillcolor{white}, \settitledrawcolor{colortwo}, \setblocktextcolor{textcolor}, \setblockfillcolor{white}, \setblocktitletextcolor{colorone}, \setblocktitlefillcolor{colortwo}, \setplainblocktextcolor{textcolor}, \setplainblockfillcolor{colorthree!40}, \setplainblocktitletextcolor{textcolor}, \setplainblocktitlefillcolor{colorthree!60}, \setinnerblocktextcolor{textcolor}, \setinnerblockfillcolor{white}, \setinnerblocktitletextcolor{white}, \setinnerblocktitlefillcolor{colorthree},

TikZposter template
It is a template for scientific posters based on a0poster and TikZ only. The current version contains five different templates (see my posters here and here). The sources of this pdf file can be found here.