Thomas F. Sturm

# A Tutorial for Poster Creation with Tcolorbox

## Poster Tutorial #1

Welcome to the poster tutorial!

We start at the very begin with an empty poster.

In this tutorial, we use A3 sized paper in landscape format which can be set up with the `geometry` package. Naturally, we need the `tcolorbox` package with at least the `poster` library loaded.

At begin, we only choose the number of columns (4) and rows (5) and we display a help grid.

```
\documentclass[12pt]{article}
\usepackage[a3paper,landscape]{geometry}
\usepackage[poster]{tcolorbox}
\pagestyle{empty}

\begin{document}
\begin{tcbposter}[
  coverage = {spread},
  poster   = {showframe,columns=4,rows=5},
]
% Here, we insert the poster content later
\end{tcbposter}
\end{document}
```

LATeX Poster

## Poster Tutorial #2

Now, we put in some fancy settings to the poster `coverage`.
Also, some more packages are loaded for the future poster content.

```latex
\documentclass[12pt]{article}
\usepackage[a3paper,landscape]{geometry}
\usepackage{lipsum}
\usepackage{lmodern}
\usepackage{enumerate}
\usepackage[poster]{tcolorbox}
\tcbuselibrary{minted} % <- replace by \tcbuselibrary{listings}, if minted does not work for you
\pagestyle{empty}

\begin{document}
\begin{tcbposter}[
  coverage = {
      spread,
      interior style={top color=yellow,bottom color=yellow!50!red},
      watermark text={\LaTeX\ Poster},
      watermark color=yellow,
  },
  poster    = {showframe,columns=4,rows=5},
]
% Here, we insert the poster content later
\end{tcbposter}
\end{document}
```

# My Important Project

title

Hans.Mustermann@deepthought.university

## Project Description

project1

## Central Picture

## Core Algorithm

project2

picture

algorithm

### Poster Tutorial #3

It is time to fill boxes into the `poster` environment. This is the most crucial part of your poster creation, because you have to decide about the general contents and the base design.

But, as you can see in the listing below, the boxes are placed with relative positions to each other and the sizes are able to change automatically.

```
%...
\posterbox{name=title,column=1,span=3,below=top}{
  \resizebox{18cm}{!}{\bfseries\Huge My Important Project}\\[3mm]
  Hans.Mustermann@deepthought.university
}

\posterbox[adjusted title=References]{name=references,column=2,span=1.5,above=bottom}{}

\posterbox[adjusted title=Process]{name=process,column=2,span=2,above=references}{}

\posterbox[adjusted title=Project Description]{name=project,
    sequence=1 between title and bottom then 2 between title and process}{}

\posterbox[adjusted title=Central Picture]
  {name=picture,column=3,between=title and process}{}

\posterbox[adjusted title=Core Algorithm]
  {name=algorithm,column=4,between=top and references}{}

\posterbox[adjusted title=Contact]
    {name=contact,column*=4,span=1.5,between=process and bottom}{}
%...
```

The `project` box is made breakable. Note the two parts `project1` and `project2` where the second part is denoted by a placeholder.

## Process

process

## References

references

## Contact

contact

# My Important Project

Hans.Mustermann@deepthought.university

## Core Algorithm

## Project Description

## Central Picture

## Poster Tutorial #4

As next step, we choose some nice settings for all the boxes. These global settings are applied using the `boxes` option of the poster.

Also, we do not need the auxiliary frame lines anymore and we set `showframe=false`.

```
%...
\begin{tcbposter}[
  coverage = {
      spread,
      interior style={top color=yellow,bottom color=yellow!50!red},
      watermark text={\LaTeX\ Poster},
      watermark color=yellow,
  },
  poster   = {showframe=false,columns=4,rows=5},
  boxes    = {
      enhanced standard jigsaw,sharp corners=downhill,arc=3mm,boxrule=1mm,
      colback=white,opacityback=0.75,colframe=blue,
      title style={left color=black,right color=cyan},
      fonttitle=\bfseries\Large\scshape
  }
]
%...
```

## Process

## References

## Contact

# My Important Project

Hans.Mustermann@deepthought.university

## Project Description

## Control Picture

## Core Algorithm

### Poster Tutorial #5

We make the `title` box different from the other boxes by removing everything except the background. Also, two pictures are added left and right which should be seen as logos or similar things.

```
%...
\posterbox[blankest,interior engine=path,height=3cm,
    halign=center,valign=center,fontupper=\bfseries\large,colupper=red!25!black,
    underlay={
        \node[right,inner sep=0pt,outer sep=0pt] at (frame.west) {\includegraphics[height=3cm]{pink_marble.png}};
        \node[left,inner sep=0pt,outer sep=0pt] at (frame.east) {\includegraphics[height=3cm]{crinklepaper.png}};
    },
]{name=title,column=1,span=3,below=top}{
    \resizebox{18cm}{!}{\bfseries\Huge My Important Project}\\[3mm]
    Hans.Mustermann@deepthought.university
}
%...
```
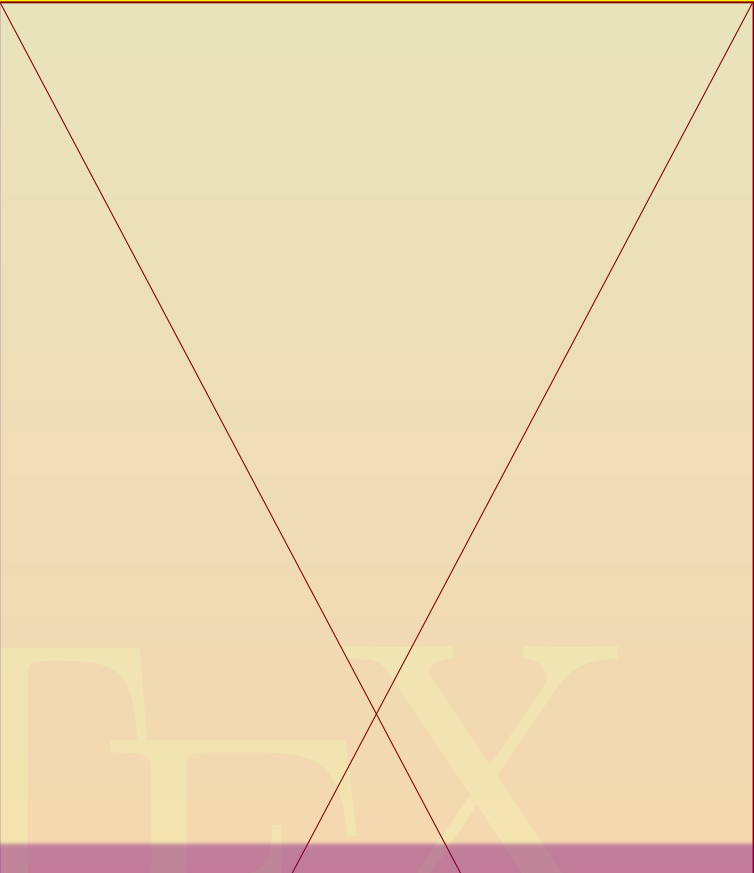
## Process

## References

## Contact

# My Important Project

**Hans.Mustermann@deepthought.university**

## Project Description

## Central Picture

## Core Algorithm

## Poster Tutorial #6

The `references` box is filled with a simple `enumerate` list.
You may insert a more fancier and LaTeXier bibliography for your real project …

```
%...
\posterbox[adjusted title=References]{name=references,column=2,span=1.5,above=bottom}{
  \begin{enumerate}[{[1]}]
  \item\label{litA} Important Authors, \textit{Important Title}
  \item\label{litB} More Important Authors, \textit{More Important Title}
  \item\label{litC} Less Important Authors, \textit{Less Important Title}
  \end{enumerate}
}
%...
```

Surely, you noted that all boxes adapt to the grown height of our `references` box. Maybe, you want to get some pages back to see how the box placements were done for this example.

## References

[1] Important Authors, *Important Title*

[2] More Important Authors, *More Important Title*

[3] Less Important Authors, *Less Important Title*

## Contact

# My Important Project

**Hans.Mustermann@deepthought.university**
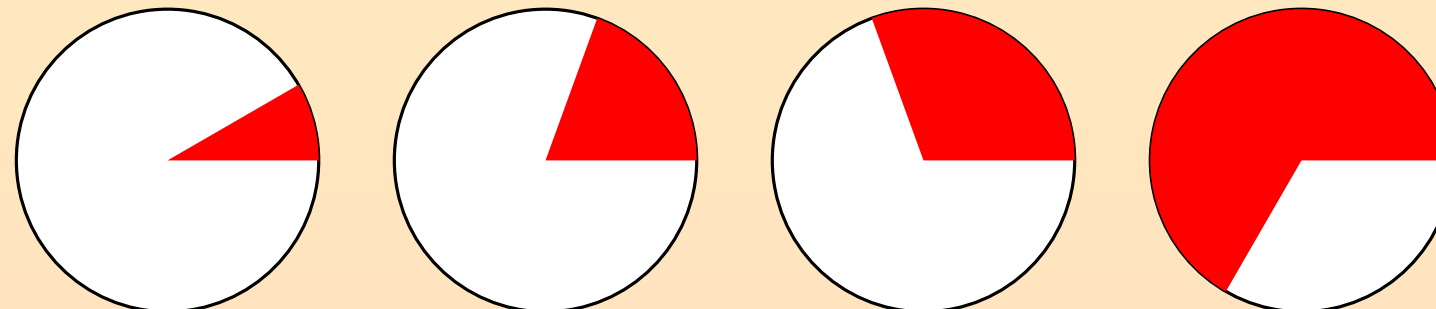
## Project Description

## Poster Tutorial #7

We go on with the `process` which gets some example `tikzpicture`.
Note that you always can insert additional `tcolorbox` options like `halign=center` to a `posterbox`.

```
%...
\posterbox[adjusted title=Process,halign=center]{name=process,column=2,span=2,above=references}{
  \begin{tikzpicture}[very thick,radius=2cm]
    \begin{scope}
      \path[draw=black,fill=white] (0,0) circle;
      \path[fill=red] (0,0) -- (2,0) arc [start angle=0, end angle=30];
    \end{scope}
    \begin{scope}[xshift=5cm]
      \path[draw=black,fill=white] (0,0) circle;
      \path[fill=red] (0,0) -- (2,0) arc [start angle=0, end angle=70];
    \end{scope}
    \begin{scope}[xshift=10cm]
      \path[draw=black,fill=white] (0,0) circle;
      \path[fill=red] (0,0) -- (2,0) arc [start angle=0, end angle=110];
    \end{scope}
    \begin{scope}[xshift=15cm]
      \path[draw=black,fill=white] (0,0) circle;
      \path[fill=red] (0,0) -- (2,0) arc [start angle=0, end angle=240];
    \end{scope}
  \end{tikzpicture}
}
%...
```

## Process



## References

[1] Important Authors, *Important Title*

[2] More Important Authors, *More Important Title*

[3] Less Important Authors, *Less Important Title*

## Contact
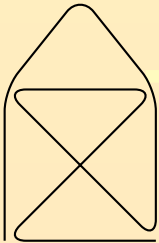
# My Important Project

**Hans.Mustermann@deepthought.university**

## Core Algorithm

## Project Description

See [1]: Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.
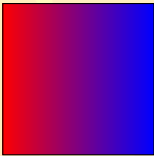
by [2]

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ip-

sum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.

See [3]: Quisque ullamcorper placerat ipsum. Cras nibh. Morbi vel justo vitae lacus tincidunt ultrices. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. In hac habitasse platea dictumst. Integer tempus convallis augue. Etiam facilisis. Nunc elementum fermentum wisi. Aenean placerat. Ut imperdiet, enim sed gravida sollicitudin, felis odio placerat quam, ac pulvinar elit purus eget enim. Nunc vitae tortor. Proin tempus nibh sit amet nisl. Vivamus quis tortor vitae risus porta vehicula.

That's all.

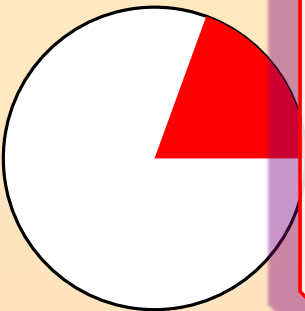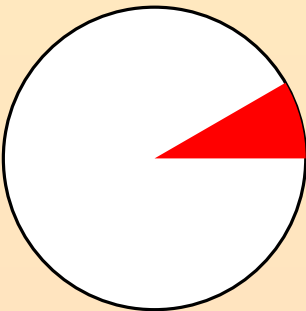## Process

## Central Picture

### Poster Tutorial #8

The `project` is a breakable box with two parts. Nevertheless, you can fill the box like any other box. The information on how to break was already given by the placement options.

```
%...
\posterbox[adjusted title=Project Description]{name=project,
    sequence=1 between title and bottom then 2 between title and process}{
  See [\ref{litA}]: \lipsum[1]
  \begin{center}
  \tikz \draw[thick,rounded corners=8pt]
    (0,0)--(0,2)--(1,3.25)--(2,2)--(2,0)--(0,2)--(2,2)--(0,0)--(2,0);
  \quad by [\ref{litB}]
  \end{center}
  \lipsum[2-3]\par
  See [\ref{litC}]:
  \lipsum[4]
  \begin{center}
  \tikz \shadedraw [left color=red,right color=blue]
  (0,0) rectangle (2,2);
  \end{center}
  That's all.
}
%...
```

The two boxes have a *closed* appearance, because we used `enhanced standard jigsaw` as global style for all boxes. For an *open* appearance, just use `enhanced jigsaw` instead:

```
%...
\begin{tcbposter}[
%...
  boxes    = {
      enhanced jigsaw,% <-----------
      sharp corners=downhill,arc=3mm,boxrule=1mm,
%...
    }
]
%...
```

## References

[1] Important Authors, *Important Title*

[2] More Important Authors, *More Important Title*

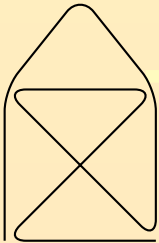[3] Less Important Authors, *Less Important Title*

## Contact

# My Important Project

**Hans.Mustermann@deepthought.university**

## Core Algorithm

## Project Description

See [1]: Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.
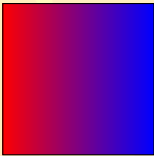
by [2]

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.

See [3]: Quisque ullamcorper placerat ipsum. Cras nibh. Morbi vel justo vitae lacus tincidunt ultrices. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. In hac habitasse platea dictumst. Integer tempus convallis augue. Etiam facilisis. Nunc elementum fermentum wisi. Aenean placerat. Ut imperdiet, enim sed gravida sollicitudin, felis odio placerat quam, ac pulvinar elit purus eget enim. Nunc vitae tortor. Proin tempus nibh sit amet nisl. Vivamus quis tortor vitae risus porta vehicula.

That's all.

## Central Picture

## Process

### Poster Tutorial #9

In our example, the whole space of the `picture` box should be filled with a given picture. This is a piece of cake using a special `interior` style:

```
%...
\posterbox[adjusted title=Central Picture,
   interior style={fill overzoom image=blueshade.png}]
   {name=picture,column=3,between=title and process}{}
%...
```

## References

[1] Important Authors, *Important Title*

[2] More Important Authors, *More Important Title*

[3] Less Important Authors, *Less Important Title*

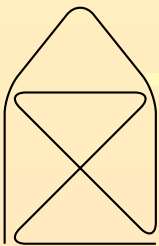## Contact

# My Important Project

**Hans.Mustermann@deepthought.university**

## Project Description

See [1]: Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

by [2]

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ip-

sum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.
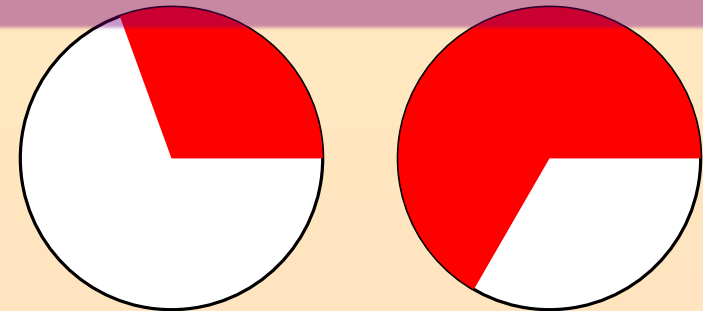
See [3]: Quisque ullamcorper placerat ipsum. Cras nibh. Morbi vel justo vitae lacus tin-

## Central Picture

## Core Algorithm

```
\begin{tikzpicture}[very thick,radius=2cm]
  \begin{scope}
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=30];
  \end{scope}
  \begin{scope}[xshift=5cm]
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=70];
  \end{scope}
  \begin{scope}[xshift=10cm]
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=110];
  \end{scope}
  \begin{scope}[xshift=15cm]
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=240];
  \end{scope}
\end{tikzpicture}

\begin{tikzpicture}[very thick,radius=1cm]
  \begin{scope}
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=30];
  \end{scope}
  \begin{scope}[xshift=5cm]
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=70];
  \end{scope}
  \begin{scope}[xshift=10cm]
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=110];
  \end{scope}
  \begin{scope}[xshift=15cm]
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=240];
  \end{scope}
\end{tikzpicture}
```
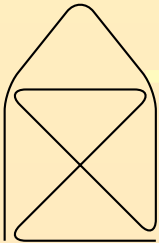
### Poster Tutorial #10

For the Algorithm, we need a `verbatim` environment. Here, `tcblisting` is used.
Therefore, we cannot use a `posterbox` as usual, but we can a `posterboxenv` environment instead.
Note that you would get some weird errors, if `posterbox` would have been applied.

```
%...
\begin{posterboxenv}[adjusted title=Core Algorithm,leftupper=0pt,rightupper=0pt]
  {name=algorithm,column=4,between=top and references}
\begin{tcblisting}{blankest,listing only}
\begin{tikzpicture}[very thick,radius=2cm]
  \begin{scope}
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=30];
  \end{scope}
%...
\end{tikzpicture}
\end{tcblisting}
\end{posterboxenv}
%...
```

## Process

## References

[1] Important Authors, *Important Title*

[2] More Important Authors, *More Important Title*

[3] Less Important Authors, *Less Important Title*

## Contact

# My Important Project

**Hans.Mustermann@deepthought.university**

## Project Description

See [1]: Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.
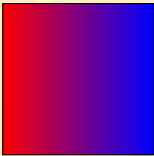
by [2]

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.

See [3]: Quisque ullamcorper placerat ipsum. Cras nibh. Morbi vel justo vitae lacus tincidunt ultrices. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. In hac habitasse platea dictumst. Integer tempus convallis augue. Etiam facilisis. Nunc elementum fermentum wisi. Aenean placerat. Ut imperdiet, enim sed gravida sollicitudin, felis odio placerat quam, ac pulvinar elit purus eget enim. Nunc vitae tortor. Proin tempus nibh sit amet nisl. Vivamus quis tortor vitae risus porta vehicula.

That's all.

## Central Picture

## Core Algorithm

```
\begin{tikzpicture}[very thick,radius=2cm]
  \begin{scope}
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=30];
  \end{scope}
  \begin{scope}[xshift=5cm]
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=70];
  \end{scope}
  \begin{scope}[xshift=10cm]
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=110];
  \end{scope}
  \begin{scope}[xshift=15cm]
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=240];
  \end{scope}
\end{tikzpicture}

\begin{tikzpicture}[very thick,radius=1cm]
  \begin{scope}
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=30];
  \end{scope}
  \begin{scope}[xshift=5cm]
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=70];
  \end{scope}
  \begin{scope}[xshift=10cm]
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=110];
  \end{scope}
  \begin{scope}[xshift=15cm]
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=240];
  \end{scope}
end{tikzpicture}
```
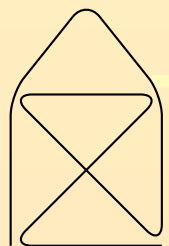
## Poster Tutorial #11

Finally, the `contact` box is filled. But, in our example case, there is not much space for a lot of contact text. Therefore, we add `fit` to fit in the text automatically.

```
%...
\posterbox[adjusted title=Contact,fit,fit basedim=12pt]
    {name=contact,column*=4,span=1.5,between=process and bottom}{
  \lipsum[2]
}
%...
```

Our poster is finished now. Just go to the next page to see the final result.

## References

[1] Important Authors, *Important Title*

[2] More Important Authors, *More Important Title*

[3] Less Important Authors, *Less Important Title*

## Contact

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

# My Important Project

**Hans.Mustermann@deepthought.university**

## Project Description

See [1]: Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.
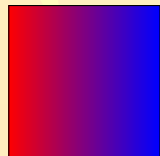
by [2]

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy pellentesque ante. Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam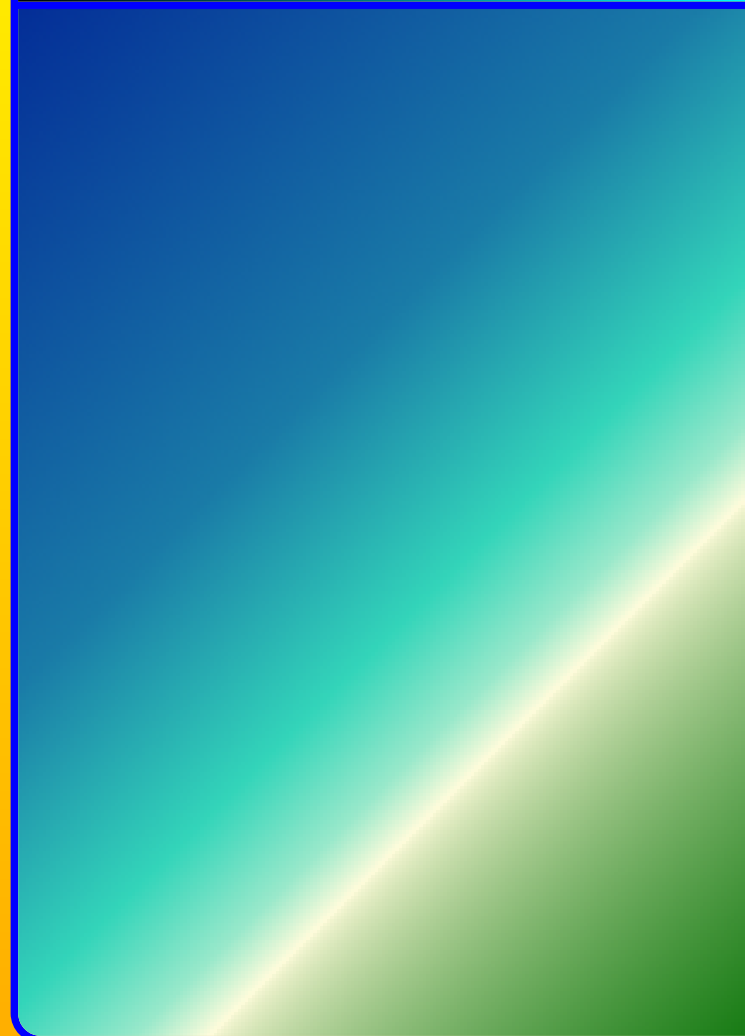 ipsum ligula, eleifend at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Donec et mi. Nam vulputate metus eu enim. Vestibulum pellentesque felis eu massa.

See [3]: Quisque ullamcorper placerat ipsum. Cras nibh. Morbi vel justo vitae lacus tincidunt ultrices. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. In hac habitasse platea dictumst. Integer tempus convallis augue. Etiam facilisis. Nunc elementum fermentum wisi. Aenean placerat. Ut imperdiet, enim sed gravida sollicitudin, felis odio placerat quam, ac pulvinar elit purus eget enim. Nunc vitae tortor. Proin tempus nibh sit amet nisl. Vivamus quis tortor vitae risus porta vehicula.
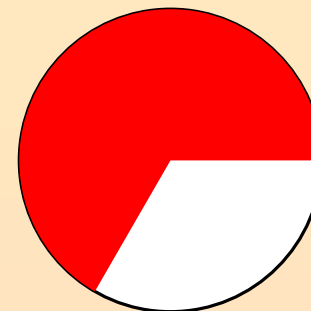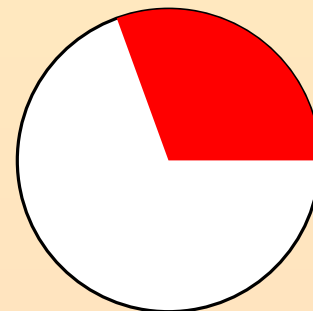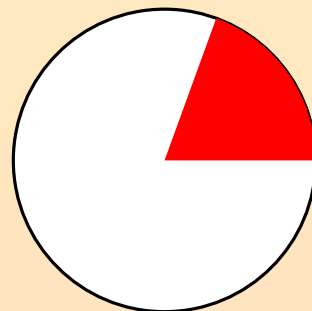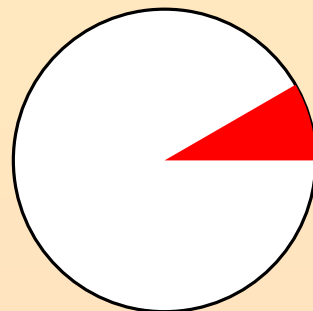
That's all.

## Central Picture

## Process



## Core Algorithm

```
\begin{tikzpicture}[very thick,radius=2cm]
  \begin{scope}
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=30];
  \end{scope}
  \begin{scope}[xshift=5cm]
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=70];
  \end{scope}
  \begin{scope}[xshift=10cm]
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=110];
  \end{scope}
  \begin{scope}[xshift=15cm]
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=240];
  \end{scope}
\end{tikzpicture}

\begin{tikzpicture}[very thick,radius=1cm]
  \begin{scope}
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=30];
  \end{scope}
  \begin{scope}[xshift=5cm]
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=70];
  \end{scope}
  \begin{scope}[xshift=10cm]
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=110];
  \end{scope}
  \begin{scope}[xshift=15cm]
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=240];
  \end{scope}
\end{tikzpicture}
```

## References

[1] Important Authors, *Important Title*

[2] More Important Authors, *More Important Title*

[3] Less Important Authors, *Less Important Title*

## Contact

Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

```
%% The LaTeX package tcolorbox - version 4.15 (2018/12/07)
%% tcolorbox-example-poster.tex: a poster example for tcolorbox
%%
%% -------------------------------------------------------------------
%%
%% Copyright (c) 2006-2018 by Prof. Dr. Dr. Thomas F. Sturm <thomas dot
     sturm at unibw dot de>
%%
%% -------------------------------------------------------------------
%%
%% This work may be distributed and/or modified under the
%% conditions of the LaTeX Project Public License, either version 1.3
%% of this license or (at your option) any later version.
%% The latest version of this license is in
%%   http://www.latex-project.org/lppl.txt
%% and version 1.3 or later is part of all distributions of LaTeX
%% version 2005/12/01 or later.
%%
%% This work has the LPPL maintenance status `author-maintained'.
%%
%% This work consists of all files listed in README
%%
% arara: pdflatex: { shell: yes }
% arara: pdflatex: { shell: yes }
\documentclass[12pt]{article}

\usepackage[a3paper,landscape]{geometry}
\usepackage{lipsum}
\usepackage{lmodern}
\usepackage{enumerate}

\usepackage[poster]{tcolorbox}
\tcbuselibrary{minted} % <- replace by \tcbuselibrary{listings}, if
     minted does not work for you

\pagestyle{empty}

\begin{document}
\begin{tcbposter}[
  coverage = {
      spread,
      interior style={top color=yellow,bottom color=yellow!50!red},
      watermark text={\LaTeX\ Poster},
      watermark color=yellow,
  },
  poster   = {showframe=false,columns=4,rows=5},
  boxes    = {
      enhanced standard jigsaw,sharp
         corners=downhill,arc=3mm,boxrule=1mm,
      colback=white,opacityback=0.75,colframe=blue,
      title style={left color=black,right color=cyan},
      fonttitle=\bfseries\Large\scshape
  }
]

%----
\posterbox[blankest,interior engine=path,height=3cm,
    halign=center,valign=center,fontupper=\bfseries\large,
       colupper=red!25!black,
    underlay={
```

```
      \node[right,inner sep=0pt,outer sep=0pt] at (frame.west)
         {\includegraphics[height=3cm]{pink_marble.png}};
      \node[left,inner sep=0pt,outer sep=0pt] at (frame.east)
         {\includegraphics[height=3cm]{crinklepaper.png}};
    },
]{name=title,column=1,span=3,below=top}{
\resizebox{18cm}{!}{\bfseries\Huge My Important Project}\\[3mm]
Hans.Mustermann@deepthought.university
}

%----
\posterbox[adjusted
     title=References]{name=references,column=2,span=1.5,above=bottom}{
\begin{enumerate}[{[1]}]
\item\label{litA} Important Authors, \textit{Important Title}
\item\label{litB} More Important Authors, \textit{More Important
     Title}
\item\label{litC} Less Important Authors, \textit{Less Important
     Title}
\end{enumerate}
}

%----
\posterbox[adjusted title=Process,halign=center]{name=process,
     column=2,span=2,above=references}{
  \begin{tikzpicture}[very thick,radius=2cm]
     \begin{scope}
       \path[draw=black,fill=white] (0,0) circle;
       \path[fill=red] (0,0) -- (2,0) arc [start angle=0, end angle=30];
     \end{scope}
     \begin{scope}[xshift=5cm]
       \path[draw=black,fill=white] (0,0) circle;
       \path[fill=red] (0,0) -- (2,0) arc [start angle=0, end angle=70];
     \end{scope}
     \begin{scope}[xshift=10cm]
       \path[draw=black,fill=white] (0,0) circle;
       \path[fill=red] (0,0) -- (2,0) arc [start angle=0, end
          angle=110];
     \end{scope}
     \begin{scope}[xshift=15cm]
       \path[draw=black,fill=white] (0,0) circle;
       \path[fill=red] (0,0) -- (2,0) arc [start angle=0, end
          angle=240];
     \end{scope}
  \end{tikzpicture}
}

%----
\posterbox[adjusted title=Project Description]{name=project,
    sequence=1 between title and bottom then 2 between title and
       process}{
See [\ref{litA}]: \lipsum[1]
\begin{center}
\tikz \draw[thick,rounded corners=8pt]
  (0,0)--(0,2)--(1,3.25)--(2,2)--(2,0)--(0,2)--(2,2)--(0,0)--(2,0);
\quad by [\ref{litB}]
\end{center}
\lipsum[2-3]\par
See [\ref{litC}]:
\lipsum[4]
\begin{center}
\tikz \shadedraw [left color=red,right color=blue]
  (0,0) rectangle (2,2);
\end{center}
That's all.
}

%----
```

```
\posterbox[adjusted title=Central Picture,
    interior style={fill overzoom image=blueshade.png}]
    {name=picture,column=3,between=title and process}{}

%----
\begin{posterboxenv}[adjusted title=Core
     Algorithm,leftupper=0pt,rightupper=0pt]
    {name=algorithm,column=4,between=top and references}
\begin{tcblisting}{blankest,listing only}
\begin{tikzpicture}[very thick,radius=2cm]
  \begin{scope}
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=30];
  \end{scope}
  \begin{scope}[xshift=5cm]
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=70];
  \end{scope}
  \begin{scope}[xshift=10cm]
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=110];
  \end{scope}
  \begin{scope}[xshift=15cm]
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=240];
  \end{scope}
\end{tikzpicture}

\begin{tikzpicture}[very thick,radius=1cm]
  \begin{scope}
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=30];
  \end{scope}
  \begin{scope}[xshift=5cm]
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=70];
  \end{scope}
  \begin{scope}[xshift=10cm]
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=110];
  \end{scope}
  \begin{scope}[xshift=15cm]
    \path[draw=black,fill=white] (0,0) circle;
    \path[fill=red] (0,0) -- (2,0)
      arc [start angle=0, end angle=240];
  \end{scope}
\end{tikzpicture}
\end{tcblisting}
\end{posterboxenv}

%----
\posterbox[adjusted title=Contact,fit,fit basedim=12pt]
    {name=contact,column*=4,span=1.5,between=process and bottom}{
  \lipsum[2]
}

\end{tcbposter}
\end{document}
```