

## Clear

```
In[ ]:= SetDirectory["C:\\drorbn\\AcademicPensieve\\Talks\\CMS-2112"];
DeleteFile /@
{"BedAndKas.tex", "Verification.tex", "RunThrough.tex", "SideBySideNB.tex"};
```

## Run

```
In[ ]:= SetDirectory["C:\\drorbn\\AcademicPensieve\\Talks\\CMS-2112"];

In[ ]:= $PageWidth = 1.23 N[284 / 72];

In[ ]:= Make["BedAndKas.tex", "BedAndKas.nb", Hold[nb2tex["BedAndKas",
"BedAndKas", PDFFolder → "Snips/BedAndKas", PDFWidth → $PageWidth]]];

In[ ]:= $PageWidth = 0.9 * 154.3 / 10 / 2.54;

In[ ]:= Make["Verification.tex", "Verification.nb", Hold[nb2tex["Verification",
"Verification", PDFFolder → "Snips/Verification", PDFWidth → $PageWidth]]];

In[ ]:= Make["RunThrough.tex", "RunThrough.nb", Hold[nb2tex["RunThrough",
"RunThrough", PDFFolder → "Snips/RunThrough", PDFWidth → $PageWidth]]];

Making {RunThrough.tex} ...

In[ ]:= Make["KSC.pdf", {"KSC.tex", "BedAndKas.tex", "Verification.tex", "RunThrough.tex"},
Hold[Run@"C:\\Program Files\\MiKTeX 2.9\\miktex\\bin\\x64\\pdflatex.exe" KSC.tex"
]]

Making {KSC.pdf} ...

Out[ ]:= 0

In[ ]:= $PageWidth = 1.1 N[284 / 72];

In[ ]:= Make["SideBySideNB.tex", "SideBySide.nb", Hold[nb2tex["SideBySide",
"SideBySideNB", PDFFolder → "Snips/SideBySide", PDFWidth → $PageWidth]]];

In[ ]:= Make["SideBySide.pdf", {"SideBySide.tex", "SideBySideNB.tex"},
Hold[
Run@"C:\\Program Files\\MiKTeX 2.9\\miktex\\bin\\x64\\pdflatex.exe" SideBySide.tex"
]]
```

## Make

```

In[ ]:= Make::usage =
  "Make[target, sources, Hold[action]] makes a target, or a list of targets, given
    sources, or a list of sources, in the style of the unix 'make' command.";
Make[target_String, sources_, action_Hold] :=
  Make[Evaluate@{target}, sources, action];
Make[targets_, source_String, action__Hold] :=
  Make[targets, Evaluate@{source}, action];
Make[targets_List, sources_List, action_Hold] := Module[{ },
  If[
    (And @@ ((FileType[#] != None) & /@ sources)) &&
    Or[
      Or @@ ((FileType[#] == None) & /@ targets),
      Min[AbsoluteTime[FileDate[#]] & /@ targets] <
        Max[AbsoluteTime[FileDate[#]] & /@ sources]
    ],
    Print["Making ", targets, " ..."];
    ReleaseHold[action]
  ]
];

```

## nb2tex

As in <http://drorbn.net/AcademicPensieve/Projects/nb2tex/>.

```

In[ ]:= SetOptions[$FrontEndSession, PrintingStyleEnvironment → "Working"];
nb2tex[nb_String, opts__Rule] := nb2tex[nb, nb, opts];

```

In[ ]:=

```

nb2tex[nb_String, tex_String, opts___Rule] := Module[
  {notebook, PDFCounter = 0, lines, type, tag, pdfname, cell, c, c1,
   PDFFolder = PDFFolder /. {opts} /. PDFFolder → nb
  },
  nb2tex$PDFWidth = PDFWidth /. {opts} /. PDFWidth → 6.5;
  notebook = NotebookGet[NotebookOpen@FileNameJoin[{Directory[], nb <> ".nb"}]];
  If[FileType[PDFFolder] === None, CreateDirectory[PDFFolder]];
  DeleteFile /@ FileNames["*.pdf", PDFFolder];
  lines = Table[
    type = cell[[2]];
    tag = CellTags /. Cases[cell, _Rule] /. CellTags → "";
    Which[
      type == "Text" ^ tag == "tex", StringReplace[cell[[1]], {"'" → "'", "\"" → "\""}],
      StringMatchQ[tag, "pdf" ~~ ___], (
        pdfname = PDFFolder <> "/" <> ToString[++PDFCounter] <> ".pdf";
        Export[pdfname, Join[cell, Cell[PageWidth → 80 nb2tex$PDFWidth / 0.75]]];
        c1 = "c:\\drorbn\\bin\\cpdf.exe -scale-page \"0.75 0.75\" " <>
          pdfname <> " -o " <> pdfname;
        Close@OpenRead["!" <> c1];
        StringReplace[
          "\\noindent\\nbpdfXXXType{pdfname}",
          {"XXX" → StringDrop[tag, 3], "Type" → type, "pdfname" → pdfname}
        ]
      ),
      type == "Text" ^ tag == "exec", ToExpression[cell[[1]]; "",
      True, ""
    ],
    {cell, Cases[notebook, c_Cell /; Length[c] ≥ 2(*^FreeQ[c, _Cell, {1,∞}]*), ∞]}
  ];
  lines = StringJoin@@Riffle[DeleteCases[lines, ""], "\n\n"];
  WriteString[tex <> ".tex", lines]; Close[tex <> ".tex"]; ]

```