

```
SetDirectory["C:\\drorbn\\AcademicPensieve\\Projects\\PPSA\\PPSA-170103"]
```

```
C:\\drorbn\\AcademicPensieve\\Projects\\PPSA
```

## Make

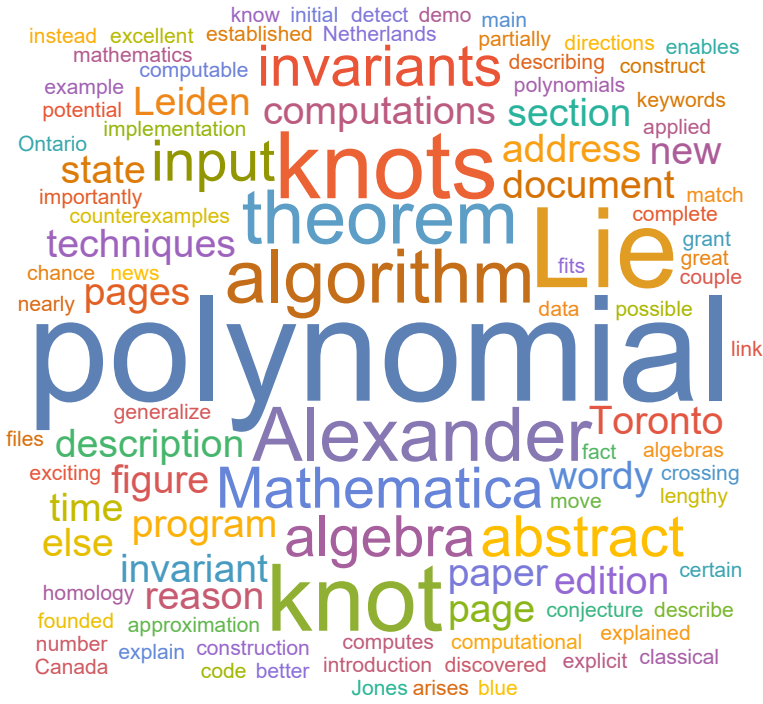
```
Make::usage =
  "Make[target, sources, Hold[action]] makes a target, or a list of targets, given sources,
  or a list of sources, in the style of the unix 'make' command.";
Make[target_String, sources_, action_Hold] := Make[Evaluate@{target}, sources, action];
Make[targets_, source_String, action__Hold] := 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]
  ]
];
```

## WordCloud

```
sources = {"PPSA.tex", "abstract.tex", "refs.tex"};
target = "WordCloud.png";
```

```
MakeWC[] := Module[{words, dict},
  words = Flatten[TextWords[ReadString[#]] & /@ sources];
  dict = Complement[
    DeleteStopwords[DictionaryLookup[]],
    {"begin", "end", "left", "right", "equation", "item", "em"}
  ];
  words = Select[words, MemberQ[dict, #] &];
  WordCloud[words, ImageSize -> 400]
]
```

```
MakeWC []
```



```
Make [target, Join[sources, {"index.nb"}], Hold[Export[target, MakeWC[]]]]
```

```
Making {WordCloud.png} ...
```

```
WordCloud.png
```

## Output

```
{
  "TitleNotes" ->
  StringJoin["<div style=\"clear: right; float: right; padding: 8px; width: 400px;\"><img width=400px
  src=WordCloud.png></div>This is the 170103 backup construction / computation page
  for my joint paper with <a class=external href=\"http://www.rolandvdv.nl/\">Roland
  van der Veen</a>, <b>A Poly-Time Knot Polynomial Via Solvable
  Approximation</b> (<a href=PPSA.pdf>PDF here</a>). <p><b>Abstract.</b> ",
  StringReplace[ReadString["abstract.tex"], {
    "~" -> "&nbsp;",
    "\\cite[1928]{Alexander:TopologicalInvariants}" -> "(1928)"
  }]
}]
```

```
{TitleNotes -> <div style="clear: right; float: right; padding: 8px; width: 400px;"><img width=400px
  src=WordCloud.png></div>This is the construction / computation page for my joint paper
  with <a class=external href="http://www.rolandvdv.nl/">Roland van der Veen</a>, <b>A
  Poly-Time Knot Polynomial Via Solvable Approximation</b> (<a href=PPSA.pdf>PDF here</a>).
  <p><b>Abstract.</b> We construct the first poly-time-computable knot polynomial since
  Alexander's&nbsp;(1928) by using some
  new commutator-calculus techniques and a Lie algebra  $\{\frac{g}{1}\}$  which
  is at the same time solvable and an approximation of the simple Lie
  algebra  $s_{1_2}$ .
}
```