

Pensieve header: This is the index file for the SL2PO project.

## Make

```

Make::usage =
  "Make[targets, 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 = {"SL2PO.tex", "abstract.tex", "intro.tex", "odds.tex", "refs.tex"};
target = "WordCloud.png";

```

```

MakeWC[opts___] := Module[{words, words1, dict, T, dict1},
  words = ToLowerCase@DeleteStopwords@Flatten[
    StringSplit[TextWords[ReadString[#]], "-"] & /@ sources
  ];
  dict = Complement[
    Union[ToLowerCase@DictionaryLookup[], StringSplit[
      "aarhus abelian acknowledgements adjoint adjoints albert alekseev alexander antipode anton
      archibald artin arxiv associator associators bardakov basepoint behaviour berceanu
      bialgebra bialgebras bijection borromean brenndle brochier cablings centres chern chu
      claspers coadjoint cocommutative cocycle coface cofactor colour coloured colourful
      colourings colours combinatorially combinatorics componentwise conjecturally crans
      dancso det diffeomorphism drinfeld dror duflo enriquez equivariant etingof exp
      exponentiate fenn fibre flavours formulae framings functionals functor functorial
      functoriality functors furusho gluings goussarov grothendieck grouplike habiro
      halacheva harinck hatcher haviv homfly homomorphic homomorphicity homonymous
      homotopic homotopies hopf ihx injective isometries isotopies isotopy jacobian
      kamnitzer kanenobu karene kashiwara kauffman kazhdan kishino kneissler knottings
      kohno kontsevich kricker kuperberg kurlin lescop leung lieberum linearization
      linearizations loday mccool meilhan meinrenken metrized milnor moded moding
      modulo multicategory multinary multiplicatively naot natan ohtsuki operad
      overcrossing overcrossings papadima parametrizing parenthesized parentetization
      parenthesization parenthesizations parenthetization perturbative planarity postfix
      preprint projectivization projectivizations proven quadrivalent quandle quandles
      reassociate reidemeister reutenauer rimanyi rolfsen roukema saito sanderson
      satoh sder selflinking semidirect semivirtual shima simons sinh skeleta skype
      subalgebra subalgebras subring surjection surjections surjective symmetrized tder
      teichmuller thurston torossian tr trivalence trivolution unbraided undercrossing
      undercrossings unfavourably unforbidden unignoring unipotent unital unitarity
      univalent unknot unoriented usb valent vassiliev vergne verma versa vertices
      virtuals voldemort warmup watanabe wirings wirtinger wko zhang zsuzsanna zsuzsi"
    ]],
    StringSplit["ac aft alpha begin beta bullet cali dj em end
      equation eta fa ill left minus natan plus red ref rh right rs ts tv ty xi"]
  ];
  dict1 = Dispatch[(# → T[#]) & /@ dict];
  words1 = Cases[words /. dict1, T[w_] :=> w, {1}];
  WordCloud[words1, opts]
]

```

MakeWC[ImageSize → 400]

```

Make[target, Join[sources, {"index.nb"}], Hold[
  Export[target, MakeWC[ImageSize → 420]];
  MakeThumb@target;
]]

```

## Output

```

{
  "TitleNotes" ->
  StringJoin["<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>Implementing the Quantum $sl_2$ Portfolio of
Operationss</b> (<a href=SL2PO.pdf>PDF here</a>). <p><b>Abstract.</b> ",
  StringReplace[ReadString["abstract.tex"], {
    "\\par" -> "<p>",
    "\\`" -> "\'", "''" -> "\"",
    "\\pageref{prog:Portfolio}" -> "??",
    "\\pageref{prog:Invariant}" -> "??",
    "\\ref{app:Tables}" -> "??",
    "at~\\web{}$\\coloneqq$\\url{\\weburl/}" -> "on this page",
    "~" -> "&nbsp;",
  }],
  "<p><b>Quick Links.</b> <a href=0v>0v</a>.",
  "\\n"
]
}

```