langsci-affiliations

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1 User guide

This package provides a command `\ResolveAffiliations`, which collects author–affiliation pairs and outputs them according to the user configuration. It is aimed at class authors, i.e. maintainers of document templates in publishing houses, universities, etc. It is probably not that useful to document authors.

`\ResolveAffiliations`

`\ResolveAffiliations` [⟨*options*⟩] {⟨*pairs of authors and affiliations*⟩}

Takes the {⟨*pairs of authors and affiliations*⟩}, orders them internally and outputs them according to the [⟨*options*⟩].

{⟨*Pairs of authors and affiliations*⟩} is a list of authors and affiliations, where authors are separated by `and` and affiliations by `;`. Affiliations are given within a phantom command `\affiliation` within the {⟨*pairs*⟩} argument – i.e. the command is not defined by this package and possibly existing definitions are left unchanged.

For example:

```
\ResolveAffiliations{
  A. U. Thor\affiliation{University of the Moon; University of Mars}
  and B. U. Thor\affiliation{University of Mars}
}
```

results in:

A. U. Thor[a,b] & B. U. Thor[b]
[a]University of the Moon [b]University of Mars

The output can be customised using the [⟨*options*⟩]. They are described below.

\SetupAffiliations | \SetupAffiliations {⟨*options*⟩}

Options can be set either globally or locally. With \SetupAffiliations{⟨*options*⟩}, they apply globally. If they are set with \ResolveAffiliations[⟨*options*⟩], they apply locally.

mark style = ⟨*style*⟩ (initially alphabetic)
Controls which markers should be used in the indexes of affiliations. Can be a either of {alphabetic, numeric, circled, none}.

output affiliation = ⟨*boolean*⟩ (initially true)
Affiliations are output if true, otherwise not.

output in groups = ⟨*boolean*⟩ (initially true)
If true, authors and affiliations are output in the same line. When false each author and affiliation gets its own line.

output authors font = ⟨*font commands*⟩ (initially \Large)
Stores the font settings for the ouput of authors.

output affiliation font = ⟨*font commands*⟩ (initially \normalsize)
Stores the font settings for outputting affiliations.

Output separators between authors and affiliations are customisable as well:

separator between two = ⟨*tokens*⟩ (initially ~&~)
If there are only two authors, use these ⟨*tokens*⟩ to separate them.

separator between multiple = ⟨*tokens*⟩ (initially ,~)
If there are more than two authors, use these ⟨*tokens*⟩ to separate every pair except the last one.

separator between final two = ⟨*tokens*⟩ (initially ~&~)
Use these ⟨*tokens*⟩ to separate the last pair of authors if ther are more than two.

separator between affiliations = ⟨*tokens*⟩ (initially ,)
Use these to separate affiliations after each authors. The affiliations in the affiliation line are always separated by a space ().

The way the input is digested can be customised with these two settings:

input names separator = ⟨*tokens*⟩ (initially ~and~)
Separates the author names in the input.

input affiliation separator = ⟨*tokens*⟩ (intially ;)
Separates the affiliations in the input, within dummy command \affiliation.

2 Implementation

```
1 ⟨*package⟩
```

```
2 ⟨@@=affiliations⟩
```

```
3 \RequirePackage{xparse}
4 \ProvidesExplPackage {langsci-affiliations}
5 {2021-02-17} {1.0.0}
6 {A LaTeX3 package to collect and order authors and affiliations}
```

\ResolveAffiliations The top-level document command. It is grouped to keep assignments local.

```
7 \NewDocumentCommand{\ResolveAffiliations}{ O{} +m }
8   {%
9     \group_begin:
10    \keys_set:nn { affiliations } { #1 }%
11    \exp_args:No \affiliations_resolve:n { #2 }%
12    \group_end:
13   }
```

(*End definition for* *\ResolveAffiliations. This function is documented on page 1.*)

\SetupAffiliations A command to define options.

```
14 \NewDocumentCommand{\SetupAffiliations}{ m }
15   {%
16    \keys_set:nn { affiliations } { #1 }
17   }
```

(*End definition for* *\SetupAffiliations. This function is documented on page 2.*)

```
18 \keys_define:nn { affiliations }
19   {
20     mark~style .tl_set:N
21       = \l__affiliations_style_tl,
22     mark~style .initial:n
23       = { alphabetic },
24     output~affiliation .bool_set:N
25       = \l__affiliations_output_affiliation_bool,
26     output~affiliation .initial:n
27       = { true },
28     output~in~groups .bool_set:N
29       = \l__affiliations_output_grouped_bool,
30     output~in~groups .initial:n
31       = { true },
32     separator~between~two .tl_set:N
33       = \l__affiliations_separator_between_two_tl,
34     separator~between~two .initial:n
35       = {~\&~},
36     separator~between~multiple .tl_set:N
37       = \l__affiliations_separator_between_mult_tl,
38     separator~between~multiple .initial:n
39       = {,~},
40     separator~between~final~two .tl_set:N
41       = \l__affiliations_separator_between_last_two_tl,
42     separator~between~final~two .initial:n
43       = {~\&~},
44     separator~between~affiliations .tl_set:N
```

```
45        = \l__affiliations_afil_separator_tl,
46     separator~between~affiliations .initial:n
47        = {,},
48     output~authors~font .cs_set:Np
49        = \__affiliations_output_authors_font:,
50     output~authors~font .initial:n
51        = {\Large},
52     output~affiliation~font .cs_set:Np
53        = \__affiliations_output_affiliation_font:,
54     output~affiliation~font .initial:n
55        = {\normalsize},
56     input~names~separator .tl_set:N
57        = \l__affiliations_input_names_sep_tl,
58     input~names~separator .initial:n
59        = {~and~},
60     input~affiliation~separator .tl_set:N
61        = \l_affiliations_input_afil_sep_tl,
62     input~affiliation~separator .initial:n
63        = {;}
64   }
```

\prop_put:Nxx
\prop_put:Nnx
\seq_set_split:Nvn
\l__affiliations_tmpa_clist
\l__affiliations_tmpa_int
\l__affiliations_affiliations_seq
\l__affiliations_authors_seq
\l__affiliations_names_seq
\l__affiliations_tmpa_seq
\l__affiliations_tmpb_seq
\l__affiliations_tmpa_tl
\l__affiliations_tmpb_tl
\l__affiliations_output_prop
\l__affiliations_affiliations_prop

Internal variants and variables

```
65
66  \cs_generate_variant:Nn \prop_put:Nnn { Nxx }
67  \cs_generate_variant:Nn \prop_put:Nnn { Nnx }
68  \cs_generate_variant:Nn \seq_set_split:Nnn { NVn }
69  \clist_new:N \l__affiliations_tmpa_clist
70  \int_new:N \l__affiliations_tmpa_int
71  \prop_new:N \l__affiliations_tmpa_prop
72  \seq_new:N \l__affiliations_affiliations_seq
73  \seq_new:N \l__affiliations_authors_seq
74  \seq_new:N \l__affiliations_names_seq
75  \seq_new:N \l__affiliations_tmpa_seq
76  \seq_new:N \l__affiliations_tmpb_seq
77  \tl_new:N \l__affiliations_tmpa_tl
78  \tl_new:N \l__affiliations_tmpb_tl
79  \prop_new:N \l__affiliations_output_prop
80  \prop_new:N \l__affiliations_affiliations_prop
```

(*End definition for* \prop_put:Nxx *and others.*)

\l__affiliations_icons_prop   The data for the circled mark style. Since this uses the \char, it is only available in XeLaTeX.

```
81  \prop_const_from_keyval:Nn \l__affiliations_icons_prop
82   {
83      0 = \char"2460,  1 = \char"2461,  2 = \char"2462,  3 = \char"2463,
84      4 = \char"2464,  5 = \char"2465,  6 = \char"2466,  7 = \char"2467,
85      8 = \char"2468,  9 = \char"2469, 10 = \char"246A, 11 = \char"246B,
86     12 = \char"246C, 13 = \char"246D, 14 = \char"246E, 15 = \char"246F,
87     16 = \char"2470, 17 = \char"2471, 18 = \char"2472, 19 = \char"2473
88   }
```

(*End definition for* \l__affiliations_icons_prop.)

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`\__affiliations_resolve_affiliations:` A helper macro to order affiliations. Is called by `\affiliations_resolve:n`.

```
89  \cs_new:Npn \__affiliations_resolve_affiliations: #1#2
90    {
91      \clist_clear:N \l__affiliations_tmpa_clist
92      \tl_if_empty:nTF {#2}
93        {
94          \prop_put:Nnn \l__affiliations_output_prop {#1} {}
95        }
96        {
97          \seq_set_split:NVn \l__affiliations_tmpa_seq
98                            \l_affiliations_input_afil_sep_tl
99                            { #2 }
100         \seq_map_inline:Nn \l__affiliations_tmpa_seq
101           {
102             \prop_get:NnNTF \l__affiliations_affiliations_prop
103                            {##1}
104                            \l__affiliations_tmpa_tl
105               {
106                 \clist_put_right:NV \l__affiliations_tmpa_clist
107                                    \l__affiliations_tmpa_tl
108               }
109               {
110                 %Not yet present
111                 \clist_put_right:Nx \l__affiliations_tmpa_clist
112                   {
113                     \prop_count:N \l__affiliations_affiliations_prop
114                   }
115                 \prop_put:Nnx \l__affiliations_affiliations_prop {##1}
116                   { \prop_count:N \l__affiliations_affiliations_prop }
117               }
118           }
119         \prop_put:NnV \l__affiliations_output_prop
120                      {#1}
121                      \l__affiliations_tmpa_clist
122        }
123    }
```

(*End definition for* `\__affiliations_resolve_affiliations:`.)

`\__affiliations_output_affiliations:` A helper macro that outputs the list of affiliations, usually below the list of authors.

```
124  \cs_new:Nn \__affiliations_output_affiliations:
125    {
126      \prop_map_inline:Nn \l__affiliations_affiliations_prop
127        {
128          \int_set:Nn \l__affiliations_tmpa_int { ##2 }
129          \str_case_e:nn { \l__affiliations_style_tl }
130            {
131              {alphabetic}
132                {
133                  \textsuperscript{\int_to_alph:n{ \int_eval:n
134                    {  \l__affiliations_tmpa_int + 1  }
135                  } }
136                }
137              {numeric}
```

```
138              { \textsuperscript{\int_eval:n {\l__affiliations_tmpa_int + 1} } } }
139            {circled}
140              {
141                \prop_item:Nn \l__affiliations_icons_prop
142                            {\l__affiliations_tmpa_int}
143              }
144            {none} { }
145          }
146        ##1 ~
147      }
148  }
```

(*End definition for* __affiliations_output_affiliations:.)

__affiliations_return_afil_text:n   A helper macro that returns the affiliation marks.

```
149  \cs_new:Npn \__affiliations_return_afil_text:n #1
150    {
151      \int_set:Nn \l__affiliations_tmpa_int { #1 }
152      \str_case_e:nn { \l__affiliations_style_tl }
153        {
154          {alphabetic}
155            {
156              \seq_put_right:Nx \l__affiliations_tmpb_seq
157                            { \int_to_alph:n{ \int_eval:n {#1 + 1} } }
158            }
159          {numeric}
160            {
161              \seq_put_right:Nx \l__affiliations_tmpb_seq
162                            { \int_eval:n {\l__affiliations_tmpa_int + 1} }
163            }
164          {circled}
165            {
166              \seq_put_right:Nx \l__affiliations_tmpb_seq
167                            { \prop_item:Nn \l__affiliations_icons_prop
168                                      { \l__affiliations_tmpa_int} }
169            }
170          {none} { }
171        }
172    }
```

(*End definition for* __affiliations_return_afil_text:n.)

__affiliations_output_authors: A helper macro to output the list of authors, with affiliation marks (if any).

```
173  \cs_new:Nn \__affiliations_output_authors:
174    {
175      \seq_clear:N \l__affiliations_tmpa_seq
176      \prop_map_inline:Nn \l__affiliations_output_prop
177        {
178          \seq_clear:N \l__affiliations_tmpb_seq
179          \clist_map_function:nN {##2} \__affiliations_return_afil_text:n
180          \tl_set:Nn \l__affiliations_tmpb_tl
181            {
182              \seq_use:Nn \l__affiliations_tmpb_seq
183                        {\l__affiliations_afil_separator_tl}
184            }
```

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```
185        \seq_put_right:Nx \l__affiliations_tmpa_seq
186          {
187            \tl_rescan:nn {} {##1}
188            \exp_not:N \textsuperscript{\tl_use:N \l__affiliations_tmpb_tl}
189          }
190        }
191      \seq_use:Nnnn \l__affiliations_tmpa_seq
192                    {\l__affiliations_separator_between_two_tl}
193                    {\l__affiliations_separator_between_mult_tl}
194                    {\l__affiliations_separator_between_last_two_tl}
195    }
```

(*End definition for* __affiliations_output_authors:.)

\affiliations_resolve:n   The main macro.

```
196  \cs_new:Npn \affiliations_resolve:n #1
197    {
198      \seq_set_split:NVn \l__affiliations_names_seq
199                        \l__affiliations_input_names_sep_tl
200                        { #1 }
201      \seq_map_inline:Nn \l__affiliations_names_seq
202        {
203          \seq_clear_new:N \l__affiliations_names_tmp_seq
204          \seq_set_split:Nnn \l__affiliations_names_tmp_seq { \affiliation }
205                            { ##1 }
206          \prop_put:Nxx \l__affiliations_tmpa_prop
207          { \seq_item:Nn \l__affiliations_names_tmp_seq {1} }
208          { \seq_item:Nn \l__affiliations_names_tmp_seq {2} }
209        }
210      \bool_if:NTF \l__affiliations_output_affiliation_bool
211        {
212          \bool_if:NTF \l__affiliations_output_grouped_bool
213            {
214              \prop_map_function:NN \l__affiliations_tmpa_prop
215                                   \__affiliations_resolve_affiliations:
216              \group_begin:
217                \__affiliations_output_authors_font:
218                \__affiliations_output_authors:
219              \group_end:\\[0.5ex]
220              \group_begin:
221                \__affiliations_output_affiliation_font:
222                \__affiliations_output_affiliations:
223              \group_end:
224            }
225            {
226              \prop_map_inline:Nn \l__affiliations_tmpa_prop
227                {
228                  \__affiliations_output_authors_font:
229                  \tl_rescan:nn {} {##1}\\[0.5ex]
230                  \group_begin:
231                    \__affiliations_output_affiliation_font:
232                    \tl_rescan:nn {} {##2}
233                  \group_end:
234                  \medskip\\
```

```
235                    }
236                \vspace*{-\baselineskip-\medskipamount}
237            }
238        }
239        {
240            \group_begin:
241            \__affiliations_output_authors_font:
242            \seq_clear:N \l__affiliations_tmpa_seq
243            \prop_map_inline:Nn \l__affiliations_tmpa_prop
244              {
245                \seq_put_right:Nx \l__affiliations_tmpa_seq
246                                {\tl_rescan:nn {} {##1} }
247              }
248            \seq_use:Nnnn \l__affiliations_tmpa_seq
249                            {\l__affiliations_separator_between_two_tl}
250                            {\l__affiliations_separator_between_mult_tl}
251                            {\l__affiliations_separator_between_last_two_tl}
252            \group_end:
253        }
254    }
```

(*End definition for* `\affiliations_resolve:n`.)

```
255 ⟨/package⟩
```