

```

sub Prolog{
my($str,$strA,@lines);
$str=shift(@_);
$strA=$str;
$strA=~s/\.bib$//;
$strA.='coauthorurl'; # safer if name doesn't end in .bib
if( -f $strA ) {
  if(open(IN,$strA) ) {
    @lines=<IN>;
    close(IN);
    $strA=join(" ",@lines);
    eval($strA);
  }
  else {print"Failed to open coauthor file file \"",$str,"\n\n";}
}
$str=~s/\.bib$//;$str.='prolog'; # safer if name doesn't end in .bib
if(open(IN,$str) ) {
  print main::OUT <IN>;
  close(IN);
}
else {print"Failed to open Prolog file \"",$str,"\n\n";}
}

sub Epilog{
my($str);
$str=shift(@_);
$str=~s/\.bib$//;$str.='epilog'; # safer if name doesn't end in .bib
if(open(IN,$str) ) {
  print main::OUT <IN>;
  close(IN);
}
else {print"Failed to open Epilog file \"",$str,"\n\n";}
}

sub BBL{
my($file);
$file=shift(@_);
$file=~s/\.bib$//;$file.='pub.html'; # safer if name doesn't end in .bib
return($file);
}

sub compute_sort_hash{
&main::reverse_input_hash(@_);
}

#####
## format_??
## author
## editors
## pages
## format_name_string
#####

sub format_author{
my($xyx);
$xyx=shift(@_);
&main::string_name_field(\${$xyx}{"author"},"Y");
}

sub format_editors{ # first_initial~last_name
my($xyx);
$xyx=shift(@_);
&main::string_name_field(\${$xyx}{"editor"},"Y");
}

sub format_pages{
my($xyx);
$xyx=shift(@_);
$item=%{${$xyx}};
${$xyx}{"pages"}=~s/--/--/;
}

sub format_name_string{
my(@names,$str,$ii,$url_hash);
$str=shift(@_);
@names=@{$str};
$str="";
for($ii=0;$ii<=#names;$ii++){
  $url_hash=$names[$ii];
  $str.=$names[$ii+1]." "; ## first
  $url_hash.=' '.$names[$ii];
  $str.=$names[$ii+1]." "; ## von
  $url_hash.=' '.$names[$ii];
  $url_hash=~s/~ / /g;$url_hash=~s/ + / /g;
  # print "----",url_hash,"----\n";
  if( defined($author_url{$url_hash}) && $author_url{$url_hash} ne "" ) {
    $url_hash=$author_url{$url_hash};
    $url_hash=~s/~ / /g; # hide url ~'s
    $str.="<a href=\"".$url_hash."\">".$names[$ii+1]."</a> "; ## url'ed last
  }
  else {
    $str.=$names[$ii+1]." "; ## last
  }
  $str.=$names[$ii]."•"; ## Jr.
}
$str=~s/ / /g;$str=~s/, + / /g;$str=~s/•$//;
$ii=index($str,'•');
if($ii>0){subst($str,$ii,1)=" and ";}
$str=~s/•/ /g;
$str=~s/ ,/,/;$str=~s/ + / /g;
return($str);
}

#####

#####
sub MR{
my($str);
$str=shift(@_);
if($str ne "" ) {
  print main::OUT "MR# ";
  if($str=~m/:/) {
    print main::OUT "<a href=\"http://www.ams.org/mathscinet-getitem?mr=";
    print main::OUT $str,">",$str,"</a>\n";
  }
  else {
    print main::OUT $str,"\n";
  }
}
}

sub ZB{
my($str);
$str=shift(@_);
if($str ne "" ) {
  print main::OUT "&nbsp; ZB# ";
  print main::OUT "<a href=\"http://gonzo.springer-ny.com/cgi-bin/zmen/ZMATH/en/zmath.html?format=1&maxdocs=20&type=html&an=";
  print main::OUT $str, "&format=complete\">";
  print main::OUT $str,"</a>";
}
}

sub textat{
my($str,$tt,$xx);
$str=shift(@_);$tt="";
while ( ($xx=index($str,"URL(")) >=0 ) {
  $tt.=substr($str,0,$xx);
  $str=substr($str,$xx+4);
  $xx=index($str,")");
  $tt.="<A href=\"".substr($str,0,$xx).\">";
  $str=substr($str,$xx+2);
  $xx=index($str,")");
  $tt.=substr($str,0,$xx)."</A>";
  $str=substr($str,$xx+1);
}
$tt.=$str;
if($tt ne "" ) {
  print main::OUT $tt;
}
}

sub Author{
my($str,$names);
$names=shift(@_);
$str=&format_name_string($names);
$str=~s/~ / /g;$str=deTeX($str);
$str=~s/\002/~ /g; # dont' confuse url ~'s with TeX ~'s
print main::OUT $str,". \n";
}

sub deTeX{
my($str);
$str=shift(@_);
$str=~s/\/ /g;$str=~s/{ /g;$str=~s/-- /g;
$str=~s/\- /g;
$str=~s/\\\"a/&uml;/g;
$str=~s/\\\"u/&uuml;/g;
$str=~s/\\\"o/&ouml;/g;
$str=~s/\\\"e/&eacute;/g;
return($str);
}

#####

sub tag_it{
my($str);
$str=shift(@_);$str=~m/ /;
print main::OUT "<b>[",$'-`+1,"</b>&nbsp;";
}

sub output_ARTICLE{
my(%item,@names,$ii,$str);
$item=%{shift(@_)};
tag_it($item{"read_in"});
@names=@{$item{"author"}};
Author(\@names);
###
if($item{"url"} ne "") {
  print main::OUT "<a href=\"",$item{"url"},">";
  print main::OUT deTeX($item{"title"},". ";
  print main::OUT "</a> ";
}
else {
  print main::OUT deTeX($item{"title"},". ";
}
print main::OUT "<em>",$item{"journal"},"</em>";
if( $item{"volume"} ne "" ) {print main::OUT "<b>",$item{"volume"},"</b> ";}
if( $item{"pages"} ne "" ) {print main::OUT " ",$item{"pages"};}
print main::OUT " ",$item{"year"},". \n";
MR($item{"mr"});
ZB($item{"zb"});
textat($item{"textat"});
print main::OUT "<br><br>\n\n";
}

sub output_BOOK{
my(%item,@names,$ii,$str);
$item=%{shift(@_)};
tag_it($item{"read_in"});
@names=@{$item{"author"}};
Author(\@names);
###
print main::OUT deTeX($item{"title"},". ";
if( $item{"series"} ne "" ) {print main::OUT " ",deTeX($item{"series"});
  if( $item{"volume"} ne "" ) {print main::OUT " <b>",$item{"volume"},"</b>";}
}
if( $item{"publisher"} ne "" ) {print main::OUT " ",deTeX($item{"publisher"});
  if( $item{"address"} ne "" ) {print main::OUT " ",deTeX($item{"address"});}
}
print main::OUT " (",$item{"year"},")";
if($item{"pages"} ne ""){print main::OUT " pp.",$item{"pages"},". \n";}
MR($item{"mr"});
ZB($item{"zb"});
print main::OUT "<br><br>\n\n";
}

sub output_INCOLLECTION{
output_INPROCEEDINGS(@_);
}

sub output_INPROCEEDINGS{
my(%item,@names,$ii,$str);
$item=%{shift(@_)};
tag_it($item{"read_in"});
@names=@{$item{"author"}};
Author(\@names);
###
if($item{"url"} ne "") {
  print main::OUT "<a href=\"",$item{"url"},">";
  print main::OUT deTeX($item{"title"},". ";
  print main::OUT "</a> ";
}
else {
  print main::OUT deTeX($item{"title"},". ";
}
###
##print main::OUT deTeX($item{"title"},". ";
###
print main::OUT "\"",deTeX($item{"booktitle"},"\", ";
if( $item{"editors"} ne "" ) {print main::OUT " (Ed. by:
  ",deTeX($item{"editors"},")");}
if( $item{"series"} ne "" ) {print main::OUT " ",deTeX($item{"series"});
  if( $item{"volume"} ne "" ) {print main::OUT " <b>",$item{"volume"},"</b>";}
}
if( $item{"publisher"} ne "" ) {print main::OUT " ",deTeX($item{"publisher"});
  if( $item{"address"} ne "" ) {print main::OUT " ",deTeX($item{"address"});}
}
print main::OUT " (",$item{"year"},")";
if($item{"pages"} ne ""){print main::OUT " pp.",$item{"pages"},". \n";}
MR($item{"mr"});
ZB($item{"zb"});
print main::OUT "<br><br>\n\n";
}

```