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== Radatools 4.0 ==
== from ==
== radalib-20160226-114357 ==
== ==
== Copyright (c) 2016 by ==
== ==
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== ==
== 26/02/2016 ==
== ==
== See LICENSE.txt ==
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#### ----- radatools 4.0 -----

- source code available, see Radalib
- added program for agglomerative hierarchical clustering: Hierarchical\_Clustering
- added program to calculate proximity matrices: Data\_To\_Proximities
- added program to calculate correlation matrices: Data\_To\_Correlations
- added program to calculate the network of communities: Communities\_Network
- added program to obtain some information of each link: Links\_Info
- added program to aggregate a multiplex network: Multiplex\_Aggregate
- added program to extract the layers of a multiplex network: Multiplex\_Extract\_Layers
- added program to symmetrize a directed network: Symmetrize\_Network
- added program to sort the nodes of a network: Sort\_Nodes
- added conversion programs: Matrix\_To\_List, Net\_To\_List
- added program to calculate elementary data statistics: Data\_Statistics
- Mesoscales\_Search renamed to Mesoscales\_Detection
- Network\_Properties: faster implementation of edge betweenness
- expanded functionality of:
  - Communities\_Detection
  - Compare\_Partitions
  - Connected\_Subgraphs
  - Mesoscales\_Detection
  - Modularity\_Calculation
  - Network\_Properties
- minor updates

#### ----- radatools 3.2 -----

- added program to calculate the modularity: Modularity\_Calculation
- expanded functionality of Network\_Properties
- minor updates

#### ----- radatools 3.1 -----

- added program to extract a subgraph from a network: Extract\_Subgraphs

#### ----- radatools 3.0 -----

- available also for MacOS X
- new modularity type: Weighted\_Link\_Rank
- communities detection:
  - new implementation of the fast algorithm
- mesoscales search updated:
  - extended to all modularity types, for self-loops in given range
  - automatic determination of self-loops range for Weighted\_Signed and Weighted\_Newman
- connected components:
  - now available the calculation of both weak and strong connected components

- new programs:
  - Size\_Reduction, Size\_Reduction\_Lol\_Expand, Convert\_Clu\_To\_Lol, Network\_Properties, Compare\_Partitions, Spanning\_Tree, Net\_To\_Matrix
- list of available programs:
  - 01-Prepare\_Network : List\_To\_Net, Matrix\_To\_Net, Connected\_Subgraphs, Size\_Reduction
  - 02-Find\_Communities: Communities\_Detection, Mesoscales\_Search, Mesoscales\_Fine\_Tuning
  - 03-Reformat\_Results: Size\_Reduction\_Lol\_Expand, Convert\_Lol\_To\_Clu, Convert\_Clu\_To\_Lol, Reformat\_Partitions
  - 04-Other\_Tools : Network\_Properties, Compare\_Partitions, Spanning\_Tree, Net\_To\_Matrix

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radatools 2.1  
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- minor updates

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radatools 2.0  
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- added programs for mesoscale search and fine-tuning
- adapted Reformat\_Partitions to deal with mesoscales files
- list of available programs:
  - 01-Prepare\_Network : List\_To\_Net, Matrix\_To\_Net, Connected\_Subgraphs
  - 02-Find\_Communities: Communities\_Detection, Mesoscales\_Search, Mesoscales\_Fine\_Tuning
  - 03-Reformat\_Results: Convert\_Lol\_To\_Clu, Reformat\_Partitions

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radatools 1.1  
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- available also for Linux 32 (compatible with Linux 64)
- minor updates

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radatools 1.0  
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- available only for Windows 32 (compatible with Windows 64)
- first release, with programs:
  - 01-Prepare\_Network : List\_To\_Net, Matrix\_To\_Net, Connected\_Subgraphs
  - 02-Find\_Communities : Communities\_Detection
  - 03-Reformat\_Partition: Convert\_Lol\_To\_Clu, Reformat\_Partition