Here's how you can set up LaTeX in VS Code:

1. **Install a LaTeX distribution:** As mentioned before, you will need a LaTeX distribution. This is what actually interprets the LaTeX code you write and compiles it into a PDF. MikTeX is a good option for Windows, MacTeX for MacOS, and TeX Live for Linux.
2. **Install LaTeX Workshop extension in VS Code:** This is a VS Code extension that adds support for LaTeX. To install it, open VS Code and go to the Extensions view (you can use the shortcut **Ctrl+Shift+X**), and then search for "LaTeX Workshop". Click Install to install it.
3. **Convert your Word document to LaTeX:** If you've written your thesis in Word, you'll need to convert it to LaTeX. Unfortunately, this is not always a straightforward process and might require manual work. There are some tools that can help with this, like Pandoc, but they might not always produce perfect results. You'll likely need to manually adjust the resulting LaTeX code to ensure it looks exactly how you want it.
4. **Write LaTeX in VS Code:** Now that you've installed the LaTeX distribution and LaTeX Workshop, you can start writing LaTeX in VS Code. You can open your .tex files in VS Code and it should provide syntax highlighting, autocompletion, and other features.
5. **Compile LaTeX to PDF:** To compile your LaTeX code to a PDF, you can use the built-in features of LaTeX Workshop. By default, you can use the shortcut **Ctrl+Alt+B** to build your LaTeX code, or **Ctrl+Alt+V** to view the PDF.

Yes, once TeX Live is installed, you can proceed with the following steps:

1. **latexmk**: This is a Perl script for running LaTeX the correct number of times to resolve cross-references, etc; it's also capable of running auxiliary programs (bibtex, makeindex) if needed. Most likely, latexmk will be installed as part of your TeX Live distribution. You can confirm this by typing **latexmk** in your command line/terminal. If it's installed, you should see a message about its usage. If it's not installed, you'll see a message like "command not found".
2. **ChkTeX**: This is a tool that can check your LaTeX code for common mistakes (such as syntax errors, deprecated commands, etc). It's not strictly necessary, but it can be helpful. You can download it from [ChkTeX's page on CTAN](https://www.ctan.org/pkg/chktex).
3. **latexindent.pl**: This is a Perl script that indents .tex files according to an indentation scheme that you can customize. It can make your LaTeX source code easier to read and edit. To check if latexindent is installed, type **latexindent** in your command line/terminal. If it's installed, you should see a message about its usage. If it's not installed, you'll see a message like "command not found". You can download it from [latexindent's page on CTAN](https://www.ctan.org/pkg/latexindent).

Linting is the process of running a program that will analyze code for potential errors. A linter is a tool that performs this linting process. In the context of LaTeX, linting is useful for catching common mistakes and bad practices in your LaTeX code.

As for latexindent.pl, it is a utility that helps with the formatting of your LaTeX code. You need it if you want your LaTeX code to be formatted in a particular way, which can be useful when you're working on large LaTeX projects. The **latexindent.pl** script is included in the TeX Live distribution, so you might already have it installed. As mentioned above, you can check its presence using the command line/terminal.

**The README file says:**

Template for Bachelor and Master theses with pdflatex according to the layout of ITS Fabian Bleier ([fabian.bleier@kit.edu](mailto:fabian.bleier@kit.edu)), September 2016

**Brief description:**

* **The main folder primarily contains the document "gesamt.tex". This in turn contains all necessary user entries (author, title, etc.).**
* **The individual chapters are invited into the overall document and are in the "kapitel" folder.**
* **The "sonstiges" folder contains all pages outside the actual body of text (formatting of headers, cover pages, packages to be included, institute logos, macros, directories, etc.)**
* **The "literatur" folder contains all files necessary for the design of a bibliography (The bibtex file, the bst file, and the actual directory).**
* **All figures can be stored in the "bilder" folder.**
* **The "dokumentation" folder contains various documentation on the packages used, as well as a expandable documentation of the LaTeX document**
* **IMPORTANT: Ensure that all packages are up to date.**
* **Command line tools texdoc [package] (TeXLive) or mthelp [package] (Miktex) provide help and instructions for packages, e.g. calling mthelp scrguide provides instructions for KOMA-Script**

Based on this information, here's a step-by-step guide:

1. **Set Up Your Environment**: Make sure that TeX Live is installed and the LaTeX extension is enabled in VS Code.
2. **Load the Template**: Open your LaTeX template in VS Code. You should see a structure similar to what's described in the README.
3. **Edit the Main Document**: Open the "gesamt.tex" file. This is your main document, and you will need to add your information (author, title, etc.) to this file.
4. **Add Your Content**: The "kapitel" folder is where you will add the individual chapters of your thesis. You can create a new **.tex** file for each chapter and then include them in the "gesamt.tex" file.
5. **Add Supplementary Files**: Add your images to the "bilder" folder, your bibliography files to the "literatur" folder, and any additional files to the "sonstiges" folder as needed.
6. **Compile Your Document**: Once all of your content is added and organized, you can compile your document in VS Code. You can do this by opening the "gesamt.tex" file and then hitting **Ctrl+Alt+B** or **Cmd+Alt+B** on a Mac.

Remember, LaTeX has a steeper learning curve than Word, especially if you're new to it, but it's a powerful tool for creating professionally typeset documents. Don't hesitate to ask if you have any questions or run into any issues.

To create and run a batch file, please follow these steps:

1. Open your text editor, such as Notepad or VS Code.
2. Paste the following lines into the text editor:

@echo off

pushd C:\Users\rofer\Auto-GPT\Auto-GPT-0.3.0

call run.bat

popd

1. Save this file as **run\_auto\_gpt.bat** in your **spatial\_disaggregation** directory.

Now, you should run this batch file from the **Anaconda Prompt**, not from PowerShell.

1. Change your current directory to **spatial\_disaggregation** by typing **cd C:\Users\rofer\spatial\_disaggregation** and pressing Enter.
2. To run the script in PowerShell, you need to specify its location more explicitly. In this case, since the script is in your current directory, you can do this by prefixing the command with .\, like so:
3. .\run\_auto\_gpt.bat

There could be a few reasons why the bibliography is not appearing. Below are some possibilities:

1. **Correct Use of Citation Command**: To include a citation from your bibliography in your document, you need to use the \cite{} command with the correct key from your .bib file. For example, to cite the EEA report in your document, you'd use \cite{eea\_2021}. If you're not citing any of the references from your .bib file in your document, they won't appear in the bibliography.
2. **Correct Path to .bib file**: The path to the .bib file needs to be correctly specified in the \bibliography{} command. Based on your .tex file, your .bib file should be in a subdirectory called "literatur". If it's not, LaTeX won't be able to find it. Your command suggests the .bib file is at "literatur/beispiel". Make sure this path is correct.
3. **Correct Bibliography Style File**: You have specified a custom bibliography style file with \bibliographystyle{literatur/itsBibStyle}. Make sure the .bst file is in the correct location and is error-free. Any issues with the .bst file could prevent the bibliography from compiling.
4. **Compiling Sequence**: The correct compiling sequence for a LaTeX document with a bibliography is to run (pdf)latex, bibtex, and then (pdf)latex twice. Make sure you're following this sequence.
5. **Encoding Issues**: If the .bib file is not in the correct encoding, it might cause problems. The .bib file should be in UTF-8 encoding.
6. **Errors in .bib File**: Check your .bib file for any syntax errors. Any errors in the file could prevent the bibliography from compiling correctly.

If you're still having trouble, please share more of your .tex file and any error messages you're seeing. It's hard to pinpoint the problem without more information.

Citations keys:

citations keys: eea\_2021 eurostat\_2021 eicher\_brewer\_2001 eurostat\_nuts jain\_dubes\_1988 macqueen\_1967 ester\_et\_al\_1996 rousseeuw\_1987 calinski\_harabasz\_1974 kaufman2009finding boeing2017osmnx openstreetmap2021planet overpass2021api nominatim2021api tagfinder2021openstreetmap flotterod2018synthetic kraftfahrt2023federal batista2003analysis garcia2010pattern pedregosa2011scikit goodfellow2016deep bishop2006pattern vandermaaten2008visualizing mcinnes2020umap rodgers1988thirteen draper1998applied cover2006elements hoerl1970ridge breiman2001random kohavi1995study hastie2009elements goodfellow2016deep (duplicate) breiman2001random (duplicate) mcculloch1943logical cortes1995support chollet2018deep rosenblatt1958perceptron glorot2011deep bishop1995neural glorot2011deep breiman2001random muller2016introduction hastie2009elements drucker1997support smola2004tutorial scholkopf2002learning chai2014root ghazanfar2014scalable verstraete2018solving goodchild1980areal freire2016development balk2006determining custer2018probabilistic elbers2003micro fernandez2020spatial tarozzi2009using mennis2006intelligent eicher2001dasymetric gallego2011disaggregating arambepola2021simulation wakefield2009bayesian goodchild1993framework monteiro2019spatial lin2021graph zhang2018deep monteiro2020cotraining

Let's proceed with debugging the issue:

1. **Compilation Order:** The process of LaTeX compilation with a bibliography requires several steps to ensure that all citations are properly resolved. A typical compilation order would be:
   * Run **pdflatex** on your main .tex file.
   * Run **bibtex** on the generated .aux file.
   * Run **pdflatex** twice more on your main .tex file.

In your case, you can follow this process in your terminal:

* + **pdflatex gesamt.tex**
  + **bibtex gesamt.aux**
  + **pdflatex gesamt.tex**
  + **pdflatex gesamt.tex**

Make sure to run these commands in the directory where your **gesamt.tex** file is located.

1. **Check the LaTeX Workshop settings:** If you're using the LaTeX Workshop extension in VS Code, ensure that it is set up to use the correct LaTeX distribution (in your case, TeX Live) and that it follows the correct build process. The configuration can be accessed from the settings (File -> Preferences -> Settings -> Extensions -> LaTeX). If you're unsure about the settings, you can refer to the [LaTeX Workshop documentation](https://github.com/James-Yu/LaTeX-Workshop).
2. **Check the LaTeX log:** After running the compilation process, LaTeX generates a log file with the same name as your main .tex file and a .log extension (e.g., **gesamt.log**). This file contains detailed information about any errors or warnings that occurred during the compilation process. You can open this file in a text editor and look for any errors related to your citations.
3. **Check the itsBibStyle.bst file:** Since you're using a custom bibliography style (**itsBibStyle.bst**), make sure this file is correct and compatible with your LaTeX setup. To check if the issue is related to this file, you can temporarily change the bibliography style to a standard one (like **plain**) by replacing **\bibliographystyle{literatur/itsBibStyle}** with **\bibliographystyle{plain}** in your **Bibliography.tex** file.
4. **Check for package conflicts:** There might be conflicts between the packages you're using, especially those related to citations and bibliographies. Please ensure that you're not loading conflicting packages in your **packages.tex** file.

./gesamt.glsdefs:27: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.27 }

      %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:55: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.55 }

      %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:83: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.83 }

      %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:111: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.111 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:139: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.139 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:167: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.167 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:195: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.195 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:223: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.223 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:251: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.251 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:279: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.279 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:307: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.307 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:335: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.335 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:363: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.363 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:391: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.391 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:419: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.419 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:447: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.447 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:475: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.475 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:503: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.503 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:531: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.531 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:559: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.559 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:587: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.587 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:615: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.615 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:643: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.643 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:671: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.671 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:699: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.699 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:727: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.727 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:755: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.755 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:783: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.783 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:811: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.811 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:839: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.839 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:867: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.867 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:895: Package glossaries **Error**: Glossary type `abbrevs' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.895 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:923: Package glossaries **Error**: Glossary type `acronyms' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.923 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:951: Package glossaries **Error**: Glossary type `acronyms' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.951 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:979: Package glossaries **Error**: Glossary type `acronyms' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.979 }

       %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:1007: Package glossaries **Error**: Glossary type `acronyms' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.1007 }

        %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:1035: Package glossaries **Error**: Glossary type `acronyms' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.1035 }

        %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:1063: Package glossaries **Error**: Glossary type `acronyms' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.1063 }

        %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:1091: Package glossaries **Error**: Glossary type `acronyms' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.1091 }

        %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:1119: Package glossaries **Error**: Glossary type `acronyms' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.1119 }

        %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:1147: Package glossaries **Error**: Glossary type `acronyms' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.1147 }

        %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:1175: Package glossaries **Error**: Glossary type `acronyms' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.1175 }

        %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:1203: Package glossaries **Error**: Glossary type `acronyms' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.1203 }

        %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:1231: Package glossaries **Error**: Glossary type `acronyms' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.1231 }

        %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:1259: Package glossaries **Error**: Glossary type `acronyms' has not been defined.

See the glossaries package documentation for explanation.

Type  H <return>  for immediate help.

 ...

l.1259 }

        %

You need to define a new glossary type, before making entries in it

./gesamt.glsdefs:1287: Package glossaries **Error**: Glossary type `acronyms' has not been defined.

Class scrreprt Warning: Incompatible usage of \@ssect detected.

(scrreprt)              You've used the KOMA-Script implementation of \@ssect

(scrreprt)              from within a non compatible caller, that does not

(scrreprt)              \scr@s@ct@@nn@m@ locally.

(scrreprt)              This could result in several error messages on input line 1.

) (./kapitel/Introduction.tex [1

]

chapter 1.

Package natbib Warning: Citation `eea\_2021' on page 2 undefined on input line 3.

Package natbib Warning: Citation `eurostat\_2021' on page 2 undefined on input line 5.

Package natbib Warning: Citation `eea\_2021' on page 2 undefined on input line 5.

LaTeX Font Info:    Font shape `T1/phv/b/n' will be

(Font)              scaled to size 13.24796pt on input line 11.

Package natbib Warning: Citation `monteiro2020cotraining' on page 2 undefined on input line 19.

[2

]

Package natbib Warning: Citation `eicher\_brewer\_2001' on page 3 undefined on input line 30.

Package natbib Warning: Citation `eurostat\_nuts' on page 3 undefined on input line 32.

[3]) (./kapitel/Related Work.tex [4]

chapter 2.

Overfull \hbox (5.9955pt too wide) in paragraph at lines 3--4

\T1/ptm/m/n/12 This chap-ter presents an al-ter-na-tive so-lu-tion to the pro-posed so-lu-tion for dis-ag-gre-gat-ing transport-

 []

[5

]) (./kapitel/Methodology.tex [6]

chapter 3.

[7

] [8] [9]

LaTeX Font Info:    Trying to load font information for TS1+ptm on input line 90.

 (c:/texlive/2023/texmf-dist/tex/latex/psnfss/ts1ptm.fd

File: ts1ptm.fd 2001/06/04 font definitions for TS1/ptm.

) [10] [11] [12]

Package natbib Warning: Citation `22' on page 13 undefined on input line 188.

Package natbib Warning: Citation `23' on page 13 undefined on input line 188.

Overfull \hbox (8.07062pt too wide) in paragraph at lines 188--189

\T1/ptm/m/n/12 Dimensionality re-duc-tion tech-niques are es-sen-tial for man-ag-ing high-dimensional datasets. These

 []

[13] [14] [15] [16]

./kapitel/Methodology.tex:282: LaTeX **Error**: Unicode character λ (U+03BB)

               not set up for use with LaTeX.

See the LaTeX manual or LaTeX Companion for explanation.

Type  H <return>  for immediate help.

 ...

l.282 ...S denotes the residual sum of squares, λ

                                                   is the regularization par...

You may provide a definition with

\DeclareUnicodeCharacter

./kapitel/Methodology.tex:282: LaTeX **Error**: Unicode character β (U+03B2)

               not set up for use with LaTeX.

See the LaTeX manual or LaTeX Companion for explanation.

Type  H <return>  for immediate help.

 ...

l.282 ...� is the regularization parameter, and β

                                                  \_i are the model coefficie...

You may provide a definition with

\DeclareUnicodeCharacter

./kapitel/Methodology.tex:282: Missing $ inserted.

<inserted text>

                $

l.282 ... is the regularization parameter, and β\_

                                                  i are the model coefficien...

I've inserted a begin-math/end-math symbol since I think

you left one out. Proceed, with fingers crossed.

./kapitel/Methodology.tex:283: Missing $ inserted.

<inserted text>

                $

l.283

I've inserted a begin-math/end-math symbol since I think

you left one out. Proceed, with fingers crossed.

Overfull \hbox (905.3462pt too wide) in paragraph at lines 282--283

\T1/ptm/m/n/12 the reg-u-lar-iza-tion pa-ram-e-ter, and $[]\OML/ztmcm/m/it/12 arethemodelcoefficients:Theresidualsumofsquares\OT1/ztmcm/m/n/12 (\OML/ztmcm/m/it/12 RSS\OT1/ztmcm/m/n/12 )\OML/ztmcm/m/it/12 isameasureofthediscrepancybetweentheactualvaluesofthedependentvariableandthepredictedvaluesfromthemodel; similartothesumofsquaresfortheresidualerror\OT1/ztmcm/m/n/12 (\OML/ztmcm/m/it/12 SSE\OT1/ztmcm/m/n/12 )\OML/ztmcm/m/it/12 mentionedearlier:$

 []

./kapitel/Methodology.tex:284: LaTeX **Error**: Unicode character λ (U+03BB)

               not set up for use with LaTeX.

See the LaTeX manual or LaTeX Companion for explanation.

Type  H <return>  for immediate help.

 ...

l.284 Higher values of λ

                          lead to stronger regularization and further shrink...

You may provide a definition with

\DeclareUnicodeCharacter

./kapitel/Methodology.tex:286: LaTeX **Error**: Unicode character λ (U+03BB)

               not set up for use with LaTeX.

See the LaTeX manual or LaTeX Companion for explanation.

Type  H <return>  for immediate help.

 ...

l.286 The regularization parameter λ

                                      is essential in striking a balance bet...

You may provide a definition with

\DeclareUnicodeCharacter

./kapitel/Methodology.tex:286: LaTeX **Error**: Unicode character λ (U+03BB)

               not set up for use with LaTeX.

See the LaTeX manual or LaTeX Companion for explanation.

Type  H <return>  for immediate help.

 ...

l.286 ...rmance. Selecting an optimal value for λ

                                                   requires cross-validation...

You may provide a definition with

\DeclareUnicodeCharacter

[17]

./kapitel/Methodology.tex:310: Missing $ inserted.

<inserted text>

                $

l.310 where p\_

              i is the proportion of samples in class i at that node.

I've inserted a begin-math/end-math symbol since I think

you left one out. Proceed, with fingers crossed.

./kapitel/Methodology.tex:311: Missing $ inserted.

<inserted text>

                $

l.311

I've inserted a begin-math/end-math symbol since I think

you left one out. Proceed, with fingers crossed.

[18]

Overfull \hbox (2.50314pt too wide) in paragraph at lines 344--345

\T1/ptm/m/n/12 By com-bin-ing the se-lected fea-tures from dif-fer-ent meth-ods, the model ben-e-fits from the strengths

 []

[19]

./kapitel/Methodology.tex:378: LaTeX **Error**: Unicode character ∞ (U+221E)

               not set up for use with LaTeX.

See the LaTeX manual or LaTeX Companion for explanation.

Type  H <return>  for immediate help.

 ...

l.378 ...ation (R-squared), which ranges from -∞

                                                   to 1. A higher R-squared ...

You may provide a definition with

\DeclareUnicodeCharacter

[20]

./kapitel/Methodology.tex:411: Missing $ inserted.

<inserted text>

                $

l.411 ...used in DBSCAN are epsilon (eps) and min\_

                                                  samples. Epsilon measures ...

I've inserted a begin-math/end-math symbol since I think

you left one out. Proceed, with fingers crossed.

./kapitel/Methodology.tex:412: Missing $ inserted.

<inserted text>

                $

l.412

I've inserted a begin-math/end-math symbol since I think

you left one out. Proceed, with fingers crossed.

Overfull \hbox (1763.78828pt too wide) in paragraph at lines 411--412

[]\T1/ptm/m/n/12 The two pri-mary pa-ram-e-ters used in DB-SCAN are ep-silon (eps) and min$[]\OML/ztmcm/m/it/12 amples:Epsilonmeasuresthemaximumdistancebetweendatapointstoqualifythemasneighbors; whilemin[]amplesindicatetheminimalnumberofrequiredpointstoformadenseregionorcluster:Whendeterminingoptimalvaluesfortheseparameters; silhouettescorecanbeusedbecauseitaccuratelyassessesclusterqualitybyevaluatingseparationbetweenclustersandcompactnesswithineachcluster\OT1/ztmcm/m/n/12 [8]\OML/ztmcm/m/it/12 :$

 []

[21]

./kapitel/Methodology.tex:433: LaTeX **Error**: Unicode character μ (U+03BC)

               not set up for use with LaTeX.

See the LaTeX manual or LaTeX Companion for explanation.

Type  H <return>  for immediate help.

 ...

l.433 ...luster, x denotes the data points, and μ

                                                  i is the centroid of the i...

You may provide a definition with

\DeclareUnicodeCharacter

[22] [23] [24]

Overfull \hbox (2.91069pt too wide) in paragraph at lines 517--518

\T1/ptm/m/n/12 Support Vec-tor Ma-chine (SVM) Re-gres-sion, an ef-fi-cient su-per-vised learn-ing al-go-rithm, is widely

 []

Overfull \hbox (5.89862pt too wide) in paragraph at lines 523--524

[]\T1/ptm/m/n/12 1. Ker-nel Se-lec-tion: A ker-nel func-tion is cho-sen to trans-form in-put data into a higher-dimensional

 []

./kapitel/Methodology.tex:525: LaTeX **Error**: Unicode character ε (U+03B5)

               not set up for use with LaTeX.

See the LaTeX manual or LaTeX Companion for explanation.

Type  H <return>  for immediate help.

 ...

l.525 2. Determining the Epsilon Tube (ε

                                         ): An epsilon value is determined t...

You may provide a definition with

\DeclareUnicodeCharacter

[25]) (./literatur/Bibliography.tex [26] (./gesamt.bbl))

Package natbib Warning: There were undefined citations.

(./gesamt.aux)

LaTeX Warning: Label(s) may have changed. Rerun to get cross-references right.

Package rerunfilecheck Warning: File `gesamt.out' has changed.

(rerunfilecheck)                Rerun to get outlines right

(rerunfilecheck)                or use package `bookmark'.

1. **Glossary Types Undefined**: You're getting repeated instances of the error: "Package glossaries Error: Glossary type **abbrevs' has not been defined." This suggests that you're trying to use a glossary type "abbrevs" and "acronyms" in your document that hasn't been defined. You need to define these glossary types before using them with the** \newglossary` command.
2. **Undefined References and Citations**: There are several warnings about undefined references and citations. This often occurs when a label or citation is referenced before it's defined, or if it's not defined at all. Make sure that all labels and citations are correctly defined in your document.
3. **Errors in your Bibliography File**: From the errors it appears that your bibliography file (**./literatur/PlainTextBibliography.tex**) is not well formatted. The error "Missing $ inserted" usually means LaTeX has found an underscore outside of math mode (since underscore is only valid in math mode). If you need underscores in text mode, you should use **\textunderscore** or **\\_**. The error "Misplaced alignment tab character &" suggests that you're using the alignment tab character **&** outside of a table or math alignment environment. Make sure your bibliography entries are correctly formatted.
4. **Overfull \hbox**: This warning is given when a line extends into the margin more than LaTeX prefers. It may not always result in visually unappealing output, but if it does, you might need to adjust your text manually.