This document provides a brief description of the code and data uploaded for the paper titled "Integrating Factor Models".

The code is written in Python and it is executed with Python version 3.9.5.

The code has two main functions: i) for the conditional asset pricing setup (described in appendices A and B) and ii) the predictive regression setup (described in appendix G). We describe the two main functions in the following. In addition to the code, we supply the necessary data in the *‘Data*’ directory. The factors returns are in the file ‘*factors-20.csv*’ and the macro-variables predictors are in the file ‘*Z - 197706.csv*’.

The main function for the conditional asset pricing models setup (appendix A and B) analysis is in the file

‘*conditionalAssetPricingLogMarginalLikelihoodTauClass.py*’

The parameter key\_start - determines which procedure of calculation is to be done among the following options:

Start.calculate\_ML - for calculating the marginal likelihood for all the models.

Start.load\_results\_singles – used for producing Table 2 and Figure 1

Start.predict\_OOS – calculating the BMA moments for the in-sample and out-of-sample analysis.

Start.single\_model\_predict\_OOS – calculating the top three models with the highest posterior probability.

Start.analyse\_OOS – used for producing Table 3, Table 5, data for Table 6, and Figure 2.

Start.summary\_statistics – used for producing Table F.2

Start.variance\_matrix – used for producing Table 7 and Figure 3.a

Start.factors\_variance – used for producing Table 8.

Start.analyse\_OOS\_performance – used for producing Table 4.

Start.calculate\_spread – calculating the Disagreement about Mispricing, Loadings, and Risk Premia.

Start.calculate\_spread\_post\_processing – used for producing the data for Table 9, Table 10, Figure 4 and Figure 5.

The main function for the predictive regression setup (appendix G) is in the file

‘*predictiveRegressionLogMarginalLikelihood.py*’

This function is used to produce Table G.3.

The complementary files:

‘*CommonFunctions.py*’, ‘*GammaFunctions.py*’, ‘*ConditionalAssetPricingCommonFunction.py*’, ‘*tictoc.py*’, and ‘*writeProfLatexTable.py*’ are containing additional utilities functions for the two main functions described previously.