



Introduction

- 1. Structural parameter identifiability describes whether a parameter value can be recovered from data before performing experiments.
- 2. A parameter is can be *locally* (finitely many values) or *globally* (uniquely) identifiable.
- 3. If neither is the case, we say that a parameter is unidentifiable and we seek *identifiable combinations* (functions of parameters that are globally identifiable).
- 4. Some parameters may be identifiable from more than one experiment. Finding the bound on the maximal amount of experiments is crucial.

Motivating Examples

A simple two-parameter model

$$\begin{cases} x' = A^2, \\ x(0) = B, \\ y = x \end{cases} \Rightarrow \begin{cases} \text{Globally: } B = y(0), \\ \text{Locally: } A = \pm \sqrt{y(1) - y(0)} \end{cases} \quad (1)$$

Unidentifiable case

$$\begin{cases} x' = 0, \\ y_1 = x, \ y_2 = Cx + D \end{cases} \Rightarrow \begin{cases} \text{Globally: } x(0) = y(0) \\ \text{Unidentifiable: } C, D \end{cases} \quad (2)$$

The latter case is mitigated by performing 2 experiments:

$$\begin{cases} x'_1 = 0, \ x'_2 = 0 \\ y_{11} = x_1, \ y_{12} = Cx_1 + D \\ y_{21} = x_2, \ y_{22} = Cx_2 + D \end{cases} \Rightarrow \begin{cases} \text{Globally: } C, D \end{cases} \quad (3)$$

Materials

- Vestibulum nisl, quis euismod velit eros in ligula.
 - Cras rhoncus quam et augue convallis in elementum urna tincidunt.
- Proin ut vestibulum augue.
 - Donec dapibus sagittis neque eu ultrices.
- Curabitur sapien ligula, faucibus in feugiat quis, vestibulum a turpis.
 - Phasellus quis nunc neque. Suspendisse mauris diam, suscipit non gravida in, placerat id enim. Ut nec ipsum in lectus ultrices sagittis.
 - Ut nec ipsum in lectus ultrices sagittis.
 - Phasellus quis nunc neque.



Figure 1:Figure caption

Methods

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 - Suspendisse potenti. Fusce a est eget turpis rhoncus varius sed sed dui. Cras justo nibh, bibendum a cursus eget, consequat et dui. Maecenas vel nisl elit, sed dignissim dolor.
 - In hac habitasse platea dictumst.
- Viewpoint Matching Constraints
 - Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus.
 - Proin in nisi diam.
 - Nam ultricies pellentesque nunc, ultrices volutpat nisl ultrices a.
- Volutpat
 - Duis semper lorem eget dui dignissim porttitor.
 - Nulla facilisi. In ullamcorper lorem quis dolor.

Mathematical Section

- Maecenas Ultricies Feugiat Velit Non Mattis.
 - Duis ante erat bibendum nec tempus nec interdum quis est. Nulla at

Results: Table

Ased Aliquet Luctus Lectus

Treatments	Response 1	Response 2
Treatment 1	0.0003262	0.562
Treatment 2	0.0015681	0.910
Treatment 3	0.0009271	0.296

Table 1:Table caption

Sollicitudin Vel Orci

Maecenas Ultricies Feugiat Velit Non Mattis.

Treatments	Response 1	Response 2
Treatment 1	0.0003262	0.562
Treatment 2	0.0015681	0.910
Treatment 3	0.0009271	0.296

Table 2:Table caption

Results: Figure



Figure 2:Figure caption

Conclusion

- Opet volutpat ligula. Duis semper lorem eget dui dignissim porttitor. Nulla facilisi. In ullamcorper lorem quis dolor iaculis nec egestas enim ultricies. Cras ut mauris elit, ut lacinia dui. Proin in ante et libero hendrerit iaculis.
- Nulla eu erat a urna laoreet auctor id a turpis. Nam mollis tristique neque eu luctus. Suspendisse rutrum congue nisi sed convallis.
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- Opet volutpat ligula. Duis semper lorem eget dui dignissim porttitor. Nulla facilisi. In ullamcorper lorem quis dolor iaculis nec egestas enim ultricies. Cras ut mauris elit, ut lacinia dui. Proin in ante et libero hendrerit iaculis.

References

Acknowledgments

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