

因果效应分析 (Causal Effect Analysis)

胡华平

西北农林科技大学

经济管理学院数量经济教研室

huhuaping01@hotmail.com

2023-12-25

西北农林科技大学

第00章：课程说明

0.1 师生互动

0.2 教材资料

0.3 软件材料

0.4 考核方式

0.5 理论课内容

0.6 实验课内容

0.1 师生互动

在线平台

在线资源

在线平台1：胡华平的个人网站

- 使用浏览器（chrome或360极速浏览器）登陆胡华平个人网站^{*}。

国内线路：<https://www.huhuaping.com/>。更新频率较低，但是国内访问速度快！

国际线路：<https://huhuaping.com/>。实时更新，国内用户访问速度受限，但是国外用户访问速度快！

说明：^{*}

- 个人开发的独立网站，应用R编程语言和Rmarkdown语言开发建设；
- 只要设备能联网，就等浏览课程资源（建议使用chrome浏览器）；
- 连接速度根据你的电信供应商而定。

在线平台1：胡华平的个人网站

- 点击首页导航栏**Teaching**，然后点击高级计量（暑期班）。

The screenshot shows the personal website of Hu HuaPing. The navigation bar at the top includes 'Home', 'Posts', 'Teaching', 'Projects', 'Publications', and 'Contact'. The 'Teaching' link is circled in red and labeled with a red '1'. A dropdown menu is open under 'Teaching', showing four options: '计量经济学(本科生)' (labeled with a red '2'), '中级计量经济学(研究生)', '统计学原理(本科生)' (labeled with a red '3'), and '高级统计学(博士)'. The third option, '数据模型与决策(MBA)', is also underlined in red. Below the navigation bar is a large circular profile picture of Hu HuaPing, a man in a blue shirt and red backpack, standing in front of a waterfall. To the right of the photo is the word 'raphy' in a large, light gray font. Below the photo, the name 'Hu Huaping' is displayed, followed by his title 'Doctor of Agricultural Economic and Management' and his affiliation 'Northwest A & F University'. To the right of the name is a section titled 'Interests' with a bulleted list: 'Data Science', 'Statistics', 'Agricultural Economics and Management', and 'Badminton'. Further to the right is a section titled 'Education' with a bulleted list of degrees: 'PhD in Agricultural Economics and Management, 2011' from 'Huazhong Agricultural University, Wuhan, China', 'MEng in Agricultural Economics and Management, 2007' from 'Huazhong Agricultural University, Wuhan, China', and 'BSc in Management, 2005' from 'Huazhong Agricultural University, Wuhan, China'. At the bottom of the page are four social media icons: an envelope, Twitter, Google+, and GitHub.

HuHuaPing Home Posts **Teaching** Projects Publications Contact

1

2

3

计量经济学(本科生)
中级计量经济学(研究生)
统计学原理(本科生)
高级统计学(博士)
数据模型与决策(MBA)

raphy

Interests

- Data Science
- Statistics
- Agricultural Economics and Management
- Badminton

Education

- PhD in Agricultural Economics and Management, 2011
Huazhong Agricultural University, Wuhan, China
- MEng in Agricultural Economics and Management, 2007
Huazhong Agricultural University, Wuhan, China
- BSc in Management, 2005
Huazhong Agricultural University, Wuhan, China

Hu Huaping

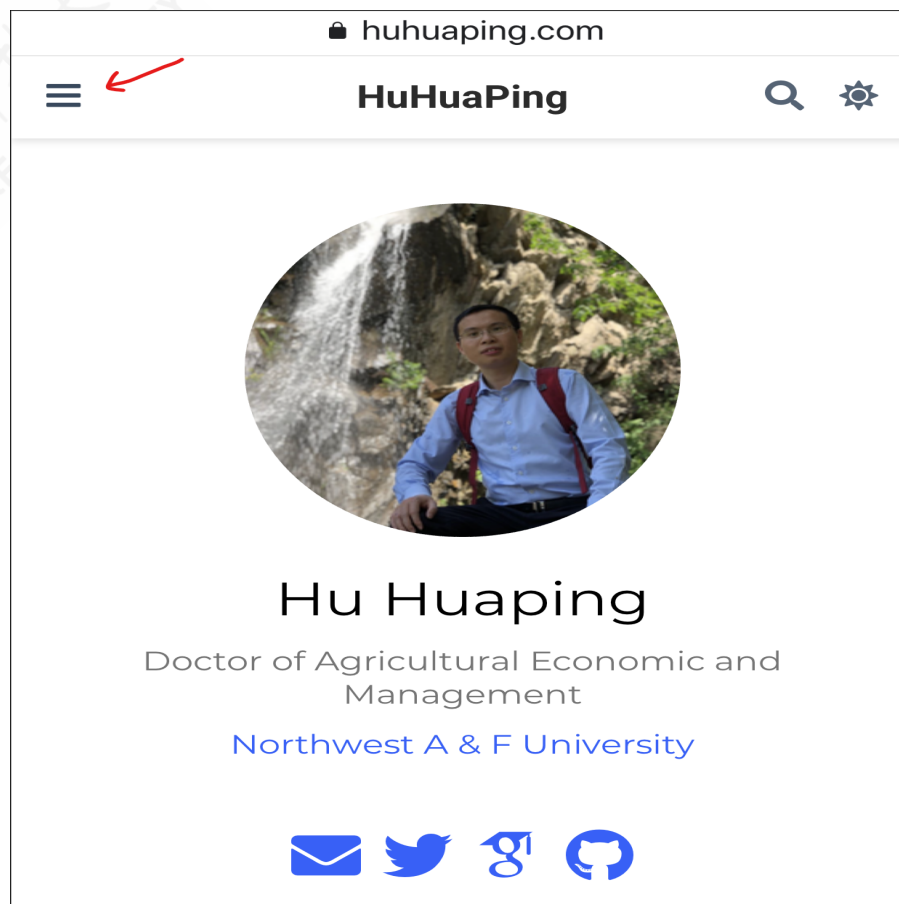
Doctor of Agricultural Economic and Management

Northwest A & F University

✉️ 🐦 🍌 🐙

在线平台1：胡华平的个人网站

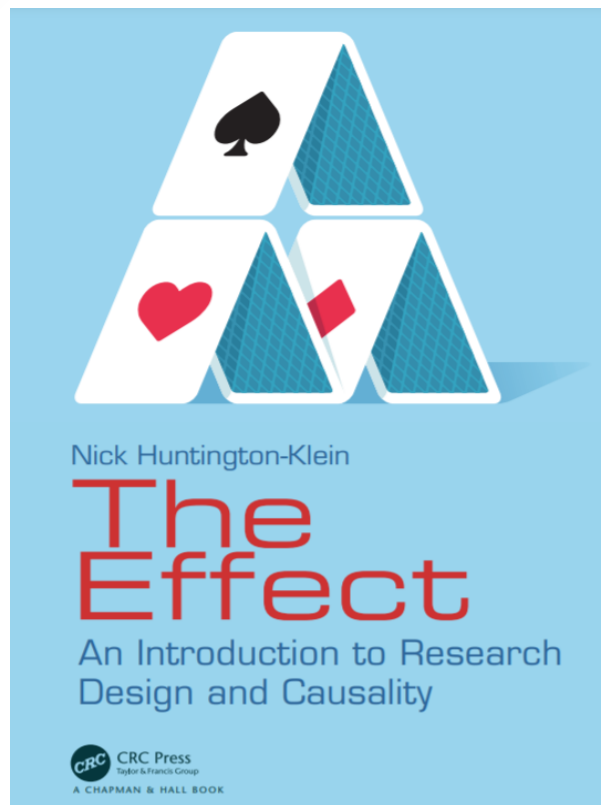
手机视图界面下，需要点击网站导航**三道杠**。



0.2 教材资料

参考教材 《效应：研究设计与因果性概论》

- Huntington-Klein N. The effect: an introduction to research design and causality[M]. Boca Raton, FL: CRC Press, 2022. ([online free](#))



可参看配套的代码资源：[github repo](#)

参考教材《因果推断：锦盒》

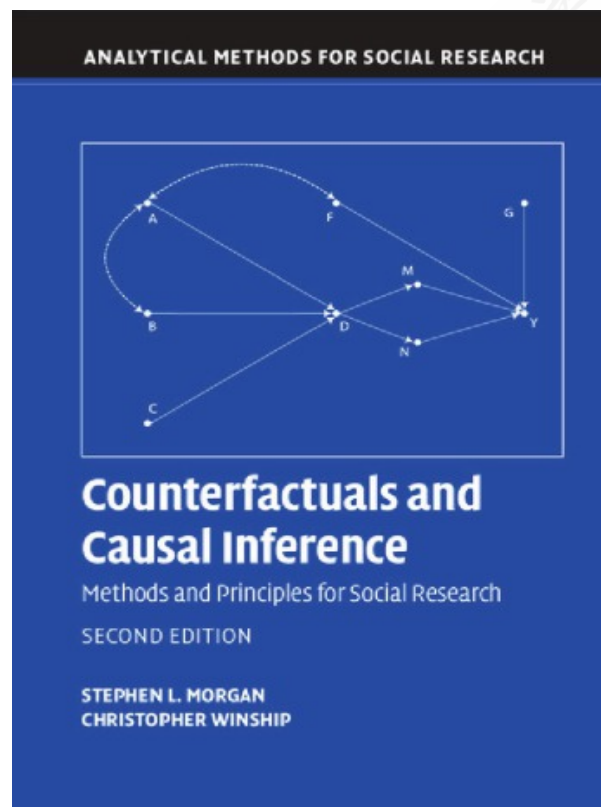
- Cunningham S. Causal Inference: The Mixtape[M]. Yale University Press, 2021.
(可以参看外文出版商的[书籍网页](#))^a



^a 可参看配套“Causal Inference: The Mixtape”(Cunningham, 2021)的在线资源：[github repo](#)

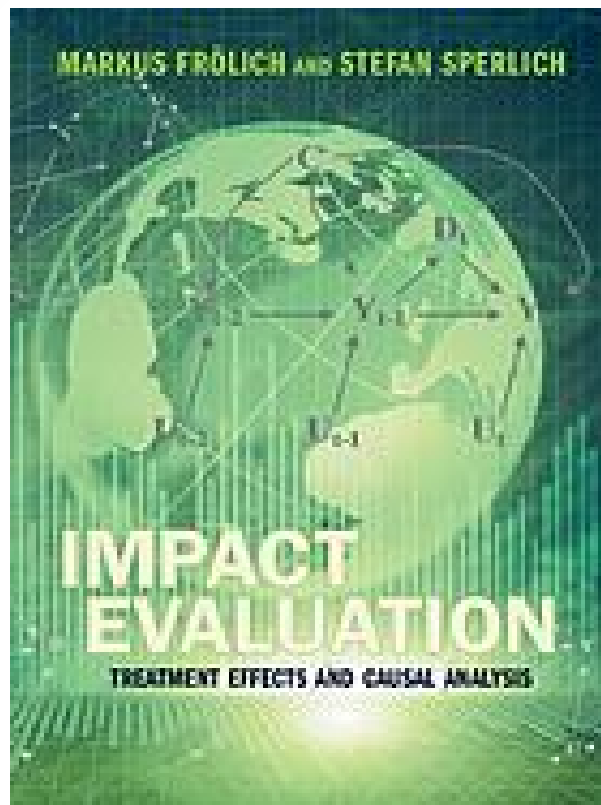
参考教材《反事实和因果推断》

- Morgan S L, Winship C. Counterfactuals and causal inference: methods and principles for social research[M]. 第2nd版. New York, NY: Cambridge University Press, 2014.



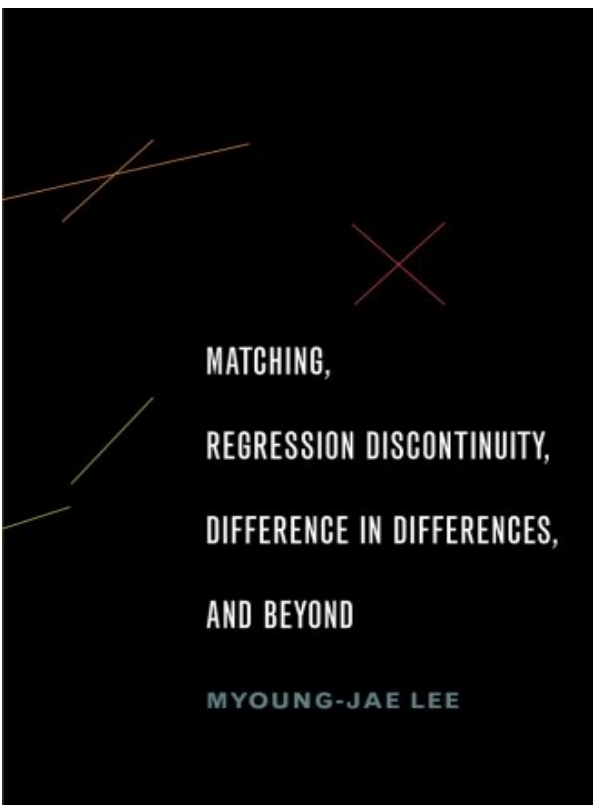
参考教材 《影响评估、处置效应及因果分析》

- Frohlich M, Sperlich S. Impact evaluation, treatment effects and causal analysis[M]. New York: Cambridge University Press, 2019.



参考教材《匹配、断点回归、双重差分及其扩展》

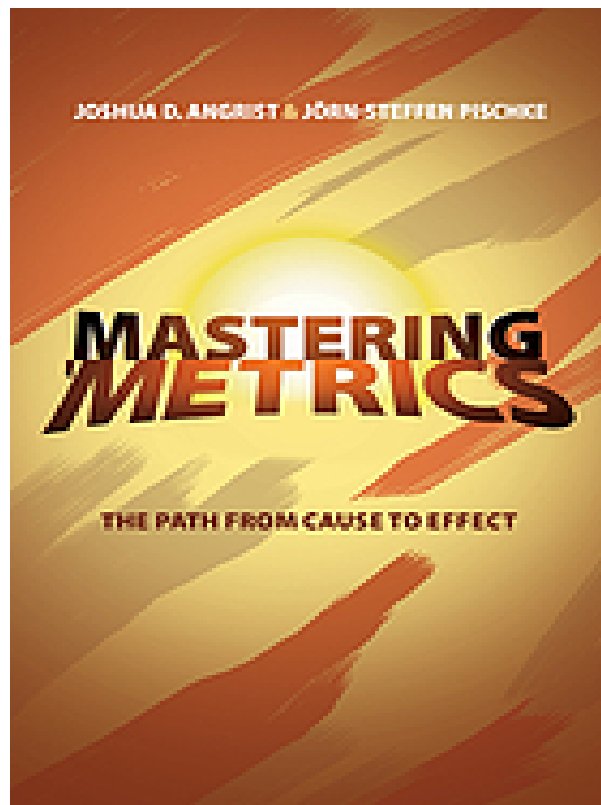
- Lee M. Matching, regression discontinuity, difference in differences, and beyond[M]. New York: Oxford University Press, 2016.



韩国学者编写。附带stata代码（参看[google个人站点](#)）。

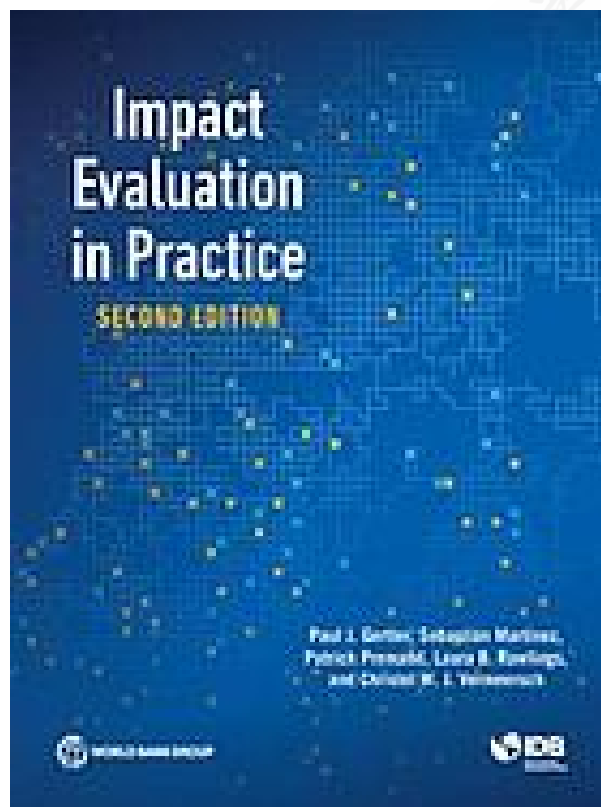
参考教材《精通"测度": 原因-效果路径》

- Angrist J D, Pischke J-S. Mastering 'Metrics: The Path from Cause to Effect[M]. Princeton, Oxford: Princeton University Press, 2015.



参考教材《影响评估实践应用》

- Gertler P, Martinez Wilde S, Premand P, Rawlings L, Vermeersch C. Inter-American Development Bank. Impact evaluation in practice[M]. 第2nd版. Washington, DC: World Bank Group, 2016.^a



^a 可以参看相关在线资源

在线资源：政策评估相关

在线learning sources:

- online book chapter "13 Experiments and Quasi-Experiments" ([see](#))
- "Chapter 12 Regression Discontinuity: Looking for Jumps in Data" ([see](#))
- 在线课程"program evaluation"。 [课程网址](#)。 chapter Regression discontinuity I & II ([链接](#))。有视频有R案例和代码。

在线资源：DID相关

- DID的资源[汇集](#)，能否打开网页根据你的网络环境而定

0.3 软件材料

自学一门软件

自学编程语言1：开源**R**软件（选用，自学）

- Tilman, Davies. The book of R: a first course in programming and statistics[M]. San Francisco : No Starch Press, 2016.
- Adler. R in a Nutshell (2ed) [M], Reilly, 2012.
- Crawley. The R Book (2nd) [M], Wiley, 2013.

自学编程语言2：开源**Python**（选用，自学）

自学编程语言3：商业**stata**软件（选用，自学）：

0.4 考核方式

考核方式

- 实操训练
- 论文汇报

西北农林科技大学
NORTHWEST A&F UNIVERSITY

西北农林科技大学
NORTHWEST A&F UNIVERSITY

西北农林科技大学
NORTHWEST A&F UNIVERSITY

0.5 理论课内容

理论课章节 (60学时)

- 专题一、工具变量 (IV) 法
- 专题二、倾向匹配法 (PSM)
- 专题三、内生转换模型 (ESR)
- 专题四、倍差法 (DID)
- 专题五、断点回归法(RD)
- 专题六、影响评估学术论文一般思路

0.6 实践课安排

实践内容

- 课外小组案例讨论和准备
- 咨询诊断大作业

本章参考文献

参考文献 (References)

Cunningham, S. (2021). *Causal Inference: The Mixtape*. Yale University Press. ISBN: 978-0-300-25168-5.

西北农林科技大学
NORTHWEST A&F UNIVERSITY

西北农林科技大学
NORTHWEST A&F UNIVERSITY

西北农林科技大学
NORTHWEST A&F UNIVERSITY

本章結束

