

# PHC OX server ♪

---

Edition : auto generated by oxgentexi on 8 June 2017

OpenXM.org

---

# 1 PHC 醇

PHC pack ox 泣若 ox\_sm1\_phc や渦帥 若拷 違茹 h . 違 <や 'phc.rr' 臂  
 . phc '\$(OpenXM\_HOME)/lib/asir-contrib' .

```
[255] phc.start();
0
[257] phc.phc([x^2+y^2-4,x*y-1]);
The detailed output is in the file tmp.output.*
The answer is in the variable Phc.
0
[260] Phc ;
[[[-0.517638,0],[-1.93185,0]],
[[1.93185,0],[0.517638,0]],
[[-1.93185,0],[-0.517638,0]],
[[0.517638,0],[1.93185,0]]]
[261]
```

Author of PHC pack: Jan Verschelde. <http://www2.math.uic.edu/~jan/download.html>  
 1: Jan Verschelde, PHCpack: A general-purpose solver for polynomial systems by homotopy continuation". ACM Transaction on Mathematical Softwares, 25(2): 251-276, 1999.

2: Cox, D., O'Shea, Little, J., Using Algebraic Geometry, Springer. Mixed volumes や  
 荀.

## 1.1 醇遺荀

### 1.1.1 phc.start

phc.start()  
 :: Localhost ox\_sm1\_phc 莎桁.

return 價

- Localhost ox\_sm1\_phc 莎桁. 莎桁 ox\_sm1\_phc ㊟ 激祉.
- Xm\_noX =1 , ox\_sm1\_phc debug window .
- 荔㊟ 激 Phc\_proc 主.

```
P = phc.start()
ox_launch, phc
```

### 1.1.2 phc.phc

phc.phc(s|proc=p)  
 :: PHC pack 撮井合緒膾 s 鴻 若.

return

p

s 鴻

- 篁 f 井合縹膾 S 惹 PHC pack 若. PHC pack 冴 Jan Verschelde . 吾 紹  
www.mth.msu.edu/~jan . PHC pack 撮井合縹膾祉茹 c ヤ吟 , ヤ潟帥 若  
拷 違 , black-box solver . black-box solver ヤ , 順 . 違 撮  
井合縹茹 c け, 吾 PHC pack , 祉 ヤ荅 帥 .
- PHC 罐 <ヤ tmp.phc.out.pid, tmp.input.\*, tmp.output.\*. pid ox\_sm1\_phc  
祉合 激 . <ヤ tmp.output.\* PHC pack 合縹膾祉茹 c 荅潟宴 c .
- 紊違 違 合縹 length(s) .

Algorithm: Jan Verschelde, PHCpack: A general-purpose solver for polynomial systems by homotopy continuation". ACM Transaction on Mathematical Softwares, 25(2): 251-276, 1999.

```
[232] P = phc.start();
0
[233] phc.phc([x^2+y^2-4,x*y-1]|proc=P);
The detailed output is in the file tmp.output.*
The answer is in the variable Phc.
0
[234] Phc;
[[[-1.93185,0],[-0.517638,0]],
 [[0.517638,0],[1.93185,0]],
 [[-0.517638,0],[-1.93185,0]],
 [[1.93185,0],[0.517638,0]]]

[x=[real, imaginary], y=[real,imaginary]], the first solution
[x=[real, imaginary], y=[real,imaginary]], the second solution
...

ox_launch, phc.start, '$(OpenXM_HOME)/bin/lin_phcv2'(original PHC pack
binary for linux)
```

# Index

(Index is nonexistent)

(Index is nonexistent)

## Short Contents

1	PHC 醇	1
Index		3

# Table of Contents

<b>1</b>	<b>PHC 醇</b>	<b>1</b>
1.1	醇 遺 荀	1
1.1.1	phc.start	1
1.1.2	phc.phc	1
<b>Index</b>		<b>3</b>