Package: AutoregressionMDE (via r-universe)

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Title Minimum Distance Estimation in Autoregressive Model

Version 1.0

Description Consider autoregressive model of order p where the distribution function of innovation is unknown, but innovations are independent and symmetrically distributed. The package contains a function named ARMDE which takes X (vector of n observations) and p (order of the model) as input argument and returns minimum distance estimator of the parameters in the model.

Depends R (>= 3.2.2)

License GPL-2

LazyData true

NeedsCompilation no

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Repository CRAN

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ARMDE *Performs minimum distance estimation in autoregressive model*

Description

Performs minimum distance estimation in autoregressive model

Usage

```
ARMDE(X, AR_Order)
```

Arguments

X   : vector of n observed value

AR_Order   : oder of the autoregressive model

Value

returns minimum distance estimators of the parameter in the autoregressive model

References

[1] Koul, H. L (1985). Minimum distance estimation in linear regression with unknown error distributions. Statist. Probab. Lett., 3 1-8.

[2] Koul, H. L (1986). Minimum distance estimation and goodness-of-fit tests in first-order autoregression. Ann. Statist., 14 1194-1213.

[3] Koul, H. L (2002). Weighted empirical process in nonlinear dynamic models. Springer, Berlin, Vol. 166

See Also

LRMDE

Examples

```
X <- rnorm(10, mean=0, sd=1)
AR_Order <- 2
rhohat<-ARMDE(X,AR_Order)
```

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